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ABSTRACT

Guidelines are provided for developing, preparing, and improving state plans for vocational education. Three audiences are identified for the manual's use: vocational educators at the state and local level, and non-vocational educators (reviewers, evaluators, etc. of state plans). Chapter 1 describes the context for the development of the state plan and includes the following: need to improve state plans; federal legislation resulting from the perceived need to improve plans; and maximizing the involvement of non-vocational educators in developing state plans. Chapter II discusses the development of the content of the plans, including preparatory activities, the planning process, and utilization of employment data. Chapter III describes the preparation of the state plans. Topics discussed are staff assignments and format design of the document. Appendixes include the following: a summary of the major provisions of state plans, with an interpretation of the rules and regulations to be followed in preparing the assurances and program provisions for the five-year plan; the annual program plan; and the accountability report. (JH)

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Research and Development Series No. 145

DEVELOPING STATE PLANS FOR VOCATIONAL EDUCATION

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U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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U.S. DEPARTMENT OF
HEALTH, EDUCATION AND WELFARE

FOREWORD

State divisions of vocational education are concerned with developing state plans for vocational education which are comprehensive in scope and responsive to the requirements and intent of the vocational education provisions of the Education Amendments of 1976. This manual was produced to provide a useful resource of ideas and information to persons who are involved in developing and reacting to state plans for vocational education.

The National Institute of Education conceived the need for the manual and funded the National Center for Research in Vocational Education to produce it in close collaboration with persons who are directly involved in the process of vocational education planning. Invaluable assistance and advice in the preparation of the manual was provided by Dr. Robert E. Pruitt of the National Institute of Education who served as project officer for this project.

Recognition for their efforts is also due to the many persons who served as consultants and as members of the project's advisory committee and technical review panel. Significant contributions to the final product were also made by co-authors Harold Starr (project director), Daniel Dunham (Maryland), William Woolf and James Harris (Colorado), and Michael Black, Kenney Gray, and Brian Fitch, research specialists, and other staff of the National Center.

Robert E. Taylor
Executive Director
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in Vocational Education

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INTRODUCTION

Purpose and Design of This Manual

The primary purpose of this manual is to serve as a resource to persons concerned with improving state plans for vocational education. This manual has been developed to enable the audiences to whom the manual is directed to better understand the *process* of developing and preparing state plans for vocational education in accordance with states' needs and federal requirements and intent.

The content and format of the manual have been designed to accommodate many different levels of understanding of the different needs for information of persons concerned with developing state plans for vocational education. The content of the manual includes federal requirements for state plans as well as practices suggested by states developing and preparing state plans. The design of the manual is also intended to accommodate, over time, new materials and additional topics.

Audiences

The manual is directed to three audiences. These audiences include:

- *vocational educators in state divisions of vocational education* who are, or will be, involved in the development and preparation of state plans for vocational education
- *vocational educators at the local level* who are contributors to the development of state plans for vocational education through the submission of pertinent educational information and applications to the state division of vocational education for program approval
- *non-vocational educators* who are, or will be, involved as advisors, reactors, or reviewers in the development of state plans for vocational education.

Development of the Manual

The National Institute of Education, the sponsor and initiator of this effort, was mindful of the fact that the content of this document needed to be guided by persons from the states who are recognized not only for their professional areas of expertise as vocational educators and/or planners, but also for their knowledge and familiarity with the problems and complexities of state plan formulation. Therefore, project staff, with guidance and approval from the National Institute of Education, selected a panel of consultants, a project advisory panel, and a technial review panel whose substantive inputs and advice have substantially guided the direction of the project and the content of this document. Appendix B contains the membership and the respective responsibilities of each group.

Topics Covered

The overall purpose of this manual is to serve as a resource to persons concerned with improving state plans for vocational education. The manual covers the following topics:

- the need to improve state plans for vocational education
- federal legislation resulting from the perceived need to improve state plans
- an overview of the contents of the five-year state plan and the annual program plan and accountability report
- maximizing the involvement of non-vocational educators in developing state plans
- preparatory activities in developing the content of state plans for vocational education
- the planning process
    - context assessment
    - needs assessment

- formulating goals and objectives
- priority setting

- planning for the preparation and submission of state plans for vocational education
- using employment data in vocational education planning
- sources of information useful for developing state plans for vocational education

The manual includes three chapters in addition to the *Introduction.* Each chapter contains information which is considered to be of value to all three audiences, although not equally to each. Chapter I, *The Context for the Development of State Plans for Vocational Education,* is intended to provide a frame of reference for current efforts by the states to develop more systematic and comprehensive state plans for vocational education than at any time in the past.

Chapter II, *Developing the Content of State Plans for Vocational Education,* contains a wide array of information about the process of developing state plans for vocational education and is based primarily on experiences which were encountered by states as they developed the first five-year state plan for vocational education as required by the Education Amendments of 1976.

Chapter III, *Preparing State Plans for Vocational Education,* describes a number of concerns which need to be dealt with in order to prepare state plan documents in a timely manner.

Limitations of the Manual

The content which is found in this manual is not complete with respect to all of the topics which could have been included for their usefulness to the manual's audiences. The topics which are found in the manual are those which were given the highest priority for inclusion by the project's panel of consultants and advisory committee.

ABSTRACT

ABSTRACT

The Abstract is intended to facilitate easy access to the various sections of the manual. By using the Abstract, the reader should be able to determine the content of each section of the manual and turn to the section containing the information needed.

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CHAPTER I, THE CONTEXT FOR THE DEVELOPMENT OF THE STATE PLANS FOR VOCATIONAL EDUCATION 12

THE NEED TO IMPROVE STATE PLANS FOR VOCATIONAL EDUCATION 12

Criticisms of the planning required by the Vocational Education Act of 1963 has led to the current requirements for five-year and annual plans.

FEDERAL LEGISLATION RESULTING FROM THE PERCEIVED NEED TO IMPROVE STATE PLANS 12

The Education Amendments of 1976 go beyond previous Federal legislation by mandating the elements to be included in state plans and by establishing two data systems which are applicable to state plan development. The elements include, but are not limited to: program goals and the rationale for them; uses of funds for meeting program needs and the rationale for these uses; and policies and procedures for distribution of vocational education funds, for coordination with CETA prime sponsors, and for improving access to programs by men and women.

MAXIMIZING THE INVOLVEMENT OF NON-VOCATIONAL EDUCATORS IN DEVELOPING STATE PLANS FOR VOCATIONAL EDUCATION 18

States are to involve a wide range of agencies and individuals in the development of the vocational education state plans. Table 1 shows roles and responsibilities of the State Board, State Advisory Council, Local Advisory Councils, and the State Plan Group.

The Essential and Required Groups 23

The state agency, as the sole agency for vocational education, has responsibility for the plan but its formulation is a joint venture of the State Board and up to ten agencies, groups, and councils. This is the State Plan Group.

The "Other" Agencies, Groups, Institutions, Individuals Who May Be Involved 24

The question of appropriate involvement of various entities must be considered. These include groups which have been typically involved in the past, and some which have not been involved.

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Coping with Input to the Plan 27

Many groups have input to the state plan. The *dynamics of group planning,* and the need for a common base of information, must be considered when working with the State Plan Group, State Board, state vocational education staff, visitors, and ad hoc interest groups. *Planning without formal groups,* such as that occurring in informal meetings and conferences, must be considered. Also, *provisions for official input opportunities must be made,* among them the public hearings mandated for the five-year plan, annual program plan, and accountability report. Every effort should be taken for *making owners out of inputers,* a goal which can be furthered by making the plan format simple and understandable and if a "popular" or "mini" version is available.

CHAPTER II, DEVELOPING THE CONTENT OF STATE PLANS FOR VOCATIONAL EDUCATION 37

PREPARATORY ACTIVITIES IN DEVELOPING THE CONTENT OF STATE PLANS FOR VOCATIONAL EDUCATION 37

Legal requirements of the Act, as well as state laws and policies impacting on vocational education, must be understood by those formulating the plan.

Planning for the Distribution of Funds 37

Section 106 of the Act makes clear that there are three main purposes for expenditure of federal funds: preparing students for work, assisting students to complete programs, and assisting students to make informed occupational choices. Federal funds are available to states for research, exemplary programs, curriculum development, guidance and counseling, inservice and preservice training, and overcoming sex bias. Funds cannot be distributed on a per capita or equal percentage basis. The state must give priority to applicants who are located in economically depressed areas and who propose programs that are new to the area and focus on new and emerging employment needs. Funds cannot be distributed if the effect is to supplant local and state dollars or if local education agencies do not maintain a level of

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expenditure consistent with historical funding patterns. Section 110 of the Act gives the percent of funds for disadvantaged and handicapped and likewise, each section dealing with distribution of dollar specifies the categories to be considered.

THE PLANNING PROCESS 39
Planning is the systematic process of organizing and assigning resources and sequencing activities to achieve some desired and possible future(s).

Describing the Context for Developing the Content of the Plan 40
While not required by the Act, a format for describing the vocational education context might include purposes and benefits for vocational education, unique features, roles and functions of the state division of vocational education, and relationships among the various agencies concerned with vocational education.

Formulating Needs, Goals, and Objectives—Where Are We Going? 45
Three needs must be addressed: program growth, program quality, and program support. Sources of data typically used to determine *program growth needs* include employment data, student placement and follow-up, and student interest data. While there is no consensus on "quality," at least three sources can be used to establish *program quality needs.* These sources include evaluation reports, federal priorities, and research findings. Program support needs that should be considered include professional development, research, and administration. Broad program goals should be formulated for each of the three needs, accompanied by specific objectives for each goal.

Operationalizing Goals and Objectives—Developing a System for Prioritizing the Allocation of Funds—How Will We Get There? 49
In making budget allocations, priority decisions may be based on local application, the best available employment data, follow-up of graduates, student accessibility, coordination with other delivery systems, economic efficiency, and program standards.

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A Supporting Section for the Plan 51
An abstract of the procedures used in developing the plan may give it greater credibility.

USING EMPLOYMENT DATA IN VOCATIONAL EDUCATION PLANNING 52
The Act emphasizes use of the best available employment data to set measurable outcomes for instructional programs, enrollments, and the mix of instructional programs by level and type of institution. To assist the states, the Act mandated formation of a National Occupational Information Coordinating Committee to improve coordination and communication among agencies using program and employment data, to develop and implement a standardized occupational information system, and to assist State Occupational Information Coordinating Committees. These state-level committees, also mandated by the Act, are to implement information systems to meet the common needs of vocational education and CETA.

Employment Data Currently Used in Vocational Education Planning 53
Problems related to selection of an employment data base include scope (planning area used), projection periods, quality of available data, and data availability. Several kinds of data bases are in use—gross employment data, new job data, job vacancy data, difference between job vacancies and new workers available, and ratio between job vacancies and new workers available.

Assembling Employment Data 56
Employment demand (the need for workers) and employment supply (persons available for meeting demand) data must be assembled in order to develop statewide vocational education program goals. State employment security agencies are the best source of information for employment demand data. Obtaining employment supply data is more complicated than obtaining employment demand data. No single agency currently collects or reports out employment supply data. The supply of trained persons entering the labor force can be identified, in part, by contacting other public and proprietary training agencies. Employment supply data also include persons in the

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"float" as well as those persons migrating into the state and others seeking new kinds of employment.

Organizing and Analyzing Data 61
Because employment data are assembled from a variety of sources, these data must be interfaced or grouped into educationally meaningful clusters. This requires that crosswalks be established between U.S.O.E. program codes, D.O.T. codes, and Census codes.

CHAPTER III, PREPARING STATE PLANS FOR VOCATIONAL EDUCATION 68

STAFF ASSIGNMENTS

Primary Staff Assignments 68
Appointment of full-time planning and/or MIS personnel is preferred.

Secondary Staff Assignments 68
Most agency staff will be asked to supply ideas and, in some cases, to write sections of the plan.

DESIGNING THE FORMAT OF THE STATE PLAN DOCUMENT

Document Use Decisions 69
Two basic positions must be declared before the plan can be written, including functional uses of the plan and size of the document.

Preparing the Plan on Time: A Sequence of Activities 70
No single sequence of events will please all states, but the easiest procedure for establishing a timeline is to start with the final submission deadline and work backwards.

The Final Deadlines 70
Several factors necessitate draft completion by March 15 in order to submit a final plan by July 1.

Sequence of Events Leading to a Complete Draft by Early March 71

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APPENDIX A: A SUMMARY OF THE MAJOR PROVISIONS OF STATE PLANS 74

The appendix contains an interpretation of the rules and regulations to be followed in preparing the assurances and program provisions for the Five-Year State Plan, the Annual Program Plan, and the Accountability Report.

CHAPTER I

THE CONTEXT FOR THE DEVELOPMENT OF STATE PLANS FOR VOCATIONAL EDUCATION

THE NEED TO IMPROVE STATE PLANS FOR VOCATIONAL EDUCATION

Vocational education planning in the United States has been stimulated and guided by federal laws; most notably in the past by the Vocational Education Act of 1963 and the subsequent Amendments to that Act. This vocational education legislation required states to develop five-year and annual program plans for vocational education and to submit state plan documents to the U.S. Office of Education for approval as a precondition for spending federal dollars allocated to the states for vocational education purposes.

The five-year and annual plans for vocational education were to address *the actual or anticipated employment opportunities, the vocational education needs of all persons in all communities, and the special vocational education needs of disadvantaged and handicapped persons.* State vocational education planning and state plan documents prepared by the states as required by the Vocational Education Act of 1963 and as amended have been widely criticized. The essence of these criticisms was that state vocational education planning had either been markedly inadequate in dealing with the purposes specified in the federal legislation for vocational education or state plan documents failed to communicate that systematic planning had actually taken place.

FEDERAL LEGISLATION RESULTING FROM THE PERCEIVED NEED TO IMPROVE STATE PLANS

The *Education Amendments of 1976, Title II, Public Law 94-482,* have replaced the Vocational Education Act of 1963. This new vocational education legislation retains the essential purposes of the former Act but places greatest emphasis on the need of the states to improve vocational education planning.

The Education Amendments of 1976 go far beyond any previous federal legislation for education and training by *prescribing:* (a) the minimal elements which must be found in state plans for vocational education for the plans to be considered approvable by the U.S. Office of Education; and, (b) the establishment of two data systems which are to be applicable to state plan development.

The elements which must be found in state plans (i.e., five-year state plans, annual program plans, and accountability reports) are depicted in Figure 1, *State Plan Elements and Relationships*. The provisions for the contents of each element are summarized in this Chapter.

The two data systems which are mandated by the Education Amendments of 1976 are: (a) the *National Vocational Education Data (reporting and accounting) System* to be jointly developed by the U.S. Office of Education and the National Center for Educational Statistics; and (b) *occupational information systems* which will meet common needs for planning and operation of vocational education programs and of administering agencies under the Comprehensive Employment and Training Act. These information systems are to be implemented by *State Occupational Information Coordinating Committees* established under the Education Amendments of 1976 and in accordance with guidance, direction, or standards provided by the *National Occupational Information Coordinating Committee* (also established by this legislation).

Many vocational educators have indicated that educational and employment data essential to the development of five-year state plans, annual program plans, and accountability reports have not been available. The Congress has reacted to this concern, and to its own concerns that the U.S. Office of Education has not provided it with sufficient information about the efficiency and effectiveness of vocational education, by specifying, in detail, the kinds of data to be included in the *National Vocational Education Data System (VEDS).* The Education Amendments of 1976 do not prescribe the contents of the states' occupational information systems, only their purposes.

The *National Vocational Education Data System* is to be (partially) implemented in the 1978-1979 school year. The *State Occupational Information Coordinating Committees* have only recently been established. As a result, the *occupational information systems* to be implemented by these bodies have not yet been operationalized.

Figure 1

STATE PLAN ELEMENTS AND RELATIONSHIPS

FIVE-YEAR STATE PLAN	ANNUAL PROGRAM PLAN	ACCOUNTABILITY REPORT
ASSURANCES Local Application Information. How Prioritizing of Local Applications is Determined. Policies and Procedures for: • Distribution of Funds • Public Disclosure • Use of Funds for Handicapped		
PROGRAM PROVISIONS Meet Employment Needs Assess Current and Future Needs for Workers. Establish Five-Year Goals in Terms of: • Instructional Programs • Programs by Level and by Type of Institution • Enrollments in These Programs • Federal, State, and Local Dollars Required • Other Goals (Optional) Describe Planned Uses of Funds for Meeting Goals for Each Fiscal Year.	PROGRAM PROVISIONS Meet Employment Needs Update Needs for Workers if Later or Better Data are Available. Update Goals if: • Later or Better Employment Data are Available • Different Level of Funding Becomes Available	PROGRAM PROVISIONS Meet Employment Needs Describe Extent to Which Goals Have Been Met.

Describe Planned Uses of Funds for Administration and Supervision for Each Fiscal Year.

Provide Rationale for Funding Decisions.

Meet Program Needs

Describe Uses of Funds for Each Fiscal Year for:

- Basic Grant Programs
- Program Inprovement
- Special Programs for Disadvantaged
- Consumer/Homemaking Education Programs
- Rationale for Choosing These Uses
- Disadvantaged, Handicapped and Persons with Limited English-Speaking Ability in Accordance with Set-Asides and Matching Requirements

Describe Policies and Procedures to Assure Equal Access to Programs by Both Men and Women.

Describe Policies and Procedures for Vocational Education and CETA Coordination.

Meet Program Needs

Update Uses of Funds for Program Purposes if New Funding Level Available:

Describe How Uses of Funds Complies with Set-Asides, Matching and Maintenance of Effort Requirements

Provide Breakdown of Distribution of Funds to Each Eligible Recipient.

Describe How Proposed Distribution Complies with Assurances.

Describe Results of Vocational Education and CETA Coordination.

Describe Results of Policies and Procedures to Assure Equal Access to Programs by Both Sexes.

Describe Results of Participation of Local Advisory Councils.

Meet Program Needs

Indicate Who Received Funds

Describe Results Achieved.

Provide Summary of Evaluation of Programs Funded Under the Act.

Describe How Evaluation Results Were Used to Improve Programs.

AN OVERVIEW OF THE CONTENTS OF THE FIVE-YEAR STATE PLAN AND THE ANNUAL PROGRAM PLAN AND ACCOUNTABILITY REPORT

The requirements for the contents of five-year state plans and annual program plans and accountability reports are found in the *Education Amendments of 1976, Title II,* (hereafter referred to as the *Act*) and the *Rules and Regulations for Vocational Education, State Programs and Commissioner's Discretionary Programs* (hereafter referred to as the *Rules and Regulations*).

The *Act* and the *Rules and Regulations* permit states to tailor state plans for vocational education to meet unique state circumstances. Thus, no two states would be expected to deal with the content of state plans in exactly the same way. There are limits, however, to the tailoring that is permitted when developing the content of state plans. The *Act* does prescribe what a state can do with its federal vocational education dollars. State laws may also prescribe what can be done with state and local funds for vocational education. There are also two constraints that must be observed in developing state plans to meet the unique needs and circumstances of states:

- federal vocational education funds can be spent only for purposes and uses specified in the *Act*
- federal vocational education funds can be spent only in accordance with formula criteria specified in the *Rules and Regulations*

The Five-Year State Plan

The content of five-year state plans must include the following:

- *procedures for carrying out certain assurances of the general application* that states must submit to qualify for federal funds under the *Act*. There are twelve (12) assurances in the general application and these are detailed in section 104.182 of the *Rules and Regulations*. State requirements for vocational education plans may also apply to certain elements related to assurances. The five-year state plan includes assurances four, five, nine, and ten of the general application

- *program provisions* as required in sections 104.183 through 104.188 and 104.621 of the *Rules and Regulations.* These program provisions include:

  a. an *assessment of employment needs* within the state or pertinent region of the country

  b. the *major goals* for the statewide vocational education system to meet employment needs

  c. the *planned uses of federal, state, and local funds* for vocational education for each year of the plan

  d. a *description of the policies and procedures* that will be followed *to assure equal access* to vocational education programs *by both men and women*

  e. the *practices* that will be followed *for coordinating vocational education* programs *and manpower training* programs

  f. the planned *uses of funds for "displaced homemakers" and "other special groups"* as defined in section 104.621 of the *Rules and Regulations*

The Annual Program Plan

The annual program plan for fiscal year 1979 and each year thereafter must contain:

- an *annual updating of employment opportunities and the goals* for that fiscal year which the state will seek with respect to its needs for workers, if:

  a. later or more accurate employment data are available

  b. the state has a different level of vocational education funding than it anticipated

- a description of the *uses of funds* under the *Act* for the fiscal year addressed by the annual program plan. This part of the plan must indicate *how these uses* will comply with, or represent changes in the uses of funds for the particular year from that presented in the five-year state plan

- a description of *how the uses of funds are in compliance* with mandated fiscal requirements in the *Act* and section 104.301 of the *Rules and Regulations with regard to minimum percentages, matching, and maintenance of effort requirements*

- the *proposed distribution of funds* among eligible recipients

- the *anticipated results of coordination of vocational education* programs *and manpower training* programs
- the *results of policies and practices to eradicate sex discrimination*
- the *results of* establishing *local vocational education advisory councils*
- the *planned uses of funds for "displaced homemakers" and "other special groups"* as defined in section 104.621 of the *Rules and Regulations.*

The Accountability Report

The accountability report will include:

- the *extent to which the state,* during the second preceding fiscal year, *achieved the goals of the approved five-year state plan*
- the *extent to which the state complied with proposed uses of federal, state, and local funds*
- a *description of the distribution of funds* among local educational agencies and other eligible recipients
- the *results achieved by* the uses of *these funds*
- a *summary of the evaluation of programs*
- a *description of how* the *evaluation* information *was used to improve* the state's *programs of vocational education.*

A summary of the major provisions of five-year state plans, annual program plans, and accountability reports are found in Appendix A.

MAXIMIZING THE INVOLVEMENT OF NONVOCATIONAL EDUCATORS IN DEVELOPING STATE PLANS FOR VOCATIONAL EDUCATION

A major purpose of the vocational education portion (Title II) of the Education Amendments of 1976, P.L. 94-482, is "to assist states in improving planning in the use of all resources available to them for vocational education and manpower

training *by involving a wide range of agencies and individuals concerned with education and training in the state in the development of the vocational education plan . . . .*" (emphasis added). Table 1 lists those entities who are involved in the development of state plans and describes their responsibilities as mandated by law.

The process of involving groups, agencies, institutions, and individuals in the development of state plans is a complex one. The particular ways in which this involvement takes place depends on many factors including:

- the degree to which all parties approach their respective roles and responsibilities with an intent to be reasonable and constructive
- the extent to which individual, agency, and institution roles and responsibilities are clearly understood and accepted

Table 1

ENTITIES INVOLVED IN THE DEVELOPMENT OF STATE PLANS
AND THEIR MANDATED RESPONSIBILITIES IN THIS DEVELOPMENT

CITATION Rules/Regs.	CITATION Act	Entity	Responsibilities
104.32 (b) (c) (d)	161 (a)	*State Board for Vocational Education*	• *coordinates the development of policy* with respect to programs under the *Act* • *coordinates the development of the five-year state plan,* the *annual program plan,* and the *accountability report* and submits these to the Commissioner of Education • *consults with the State Advisory Council on Vocational Education and the "State planning council or group"* whose memberships are described below • *cooperates with the National Center for Educational Statistics* by submitting information required for a national vocational education data reporting and accounting system
104.402	112 (b) (1)		• *develops* (or delegates responsibility for the development of) *plans to evaluate the effectiveness of each program under the Act*
104.93	105 (d) (1–3), (4) (A), (g)	*State Advisory Council for Vocational Education*	The state advisory council for vocational education: • *advises the state board in the development of state plans.* A statement describing its consultation with the state board is submitted with each state plan

CITATION Rules/Regs.	Act	Entity	Responsibilities
			• *advises the state board on policy matters* arising out of the administration of state plans • *assists the state board in developing* plans for state board *evaluations of programs* under the *Act* and monitors these evaluations • *annually evaluates vocational education programs, services, and activities* and *prepares and submits an annual evaluation report* through the state board *to the National Advisory Council on Vocational Education and to the U.S. Office of Education. This evaluation report includes:* a. the *results of evaluations by the state advisory council of the effectiveness of vocational education* during the past fiscal year *in meeting the goals set forth in the five-year state plan and annual program plan* b. a *review of* the state board's *program evaluation results* c. a *review of* the analyses of *the distribution of federal funds* under the *Act* as set forth in the annual program plan and accountability report d. *recommended changes* in vocational education programs, services, and activities *based on the results of its overall evaluation* e. the *identification of vocational education and training and employment needs of the state* and the *assessment of the extent to which programs* under the *Act* and related *Acts represent a consistent, integrated, and coordinated approach to meeting these needs*

CITATION Rules/Regs.	Act	Entity	Responsibilities
			The membership, meetings and rules, staff and services, and fiscal control requirements are found in sections 104.92 and 104.94 through 104.96 of the *Rules and Regulations.*
104.112 (a) (b)	105 (g) (1) 106 (a) (4) (A)	*Local Advisory Councils*	The local advisory councils: • *advise eligible recipients about:* a. *current job needs* b. *relevance of programs being offered* by the local educational agency or postsecondary educational agency *in meeting currrent needs* • *consult with eligible recipients in the development of the local application* The provisions for the establishment of these councils is found in section 104.111 of the *Rules and Regulations.*
104.163	107 (a) (1)	*State Plan Group*	The state board convenes *as a group, representatives of ten (10) agencies, and councils* as named in section 104.182 of the *Rules and Regulations* to: • *participate in the development of, and review drafts of,* five-year state plans, the annual program plans, and accountability reports • *recommend the adoption of* the *final versions of* these *documents* The number of meetings and the purpose of each meeting is set forth in sections 104.163 and 104.205 of the *Rules and Regulations.*

It will take several more years of experience by the states before the most useful practices for involving groups and individuals in the process of state plan development can be assessed. However, even the limited experiences of the states to date have produced some helpful insights about how to deal effectively with this issue.

The remainder of this section provides an approach for *maximizing* the involvement of groups, agencies, councils, and individuals in the formulation of state plans for vocational education. The suggestions and comments which are presented do, at times, go well beyond what is required by the *Act* but are consistent with the purpose of the *Act* as stated above.

The Essential and Required Groups

Section 104 (a) (1) (A) and (B) of the *Act* establishes the "sole state agency" concept and vests plan formulation, coordination, and submission with that agency. This section states that:

> Any state desiring to participate in the programs authorized by this *Act* shall, consistent with State law, designate or establish a *State Board* or *agency* (hereafter in this *Act* referred to as the *"State Board"*) which shall be the *sole State agency* responsible for the administration of such programs. The responsibilities of the *State Board* shall include –
> (A) the coordination of the development of policy with respect to such programs;
> (B) the *coordination* of the development, *and the actual submission* to the Commissioner of the five-year state plan required by Section 107 and of the annual program plan and accountability report required by Section 108 . . (emphasis added)

Thus, the state agency designated as sole agency for vocational education has preeminent responsibility and authority for formulating the plan and coordinating its development and its submission. State plan development, or "formulation" as it is cited in the *Act* is, however, a joint venture between the *State Board* and one representative from each of up to ten of the following agencies, groups, and councils which are set forth under Section 107 (a) (1) (A) through (J).

- secondary vocational programs
- postsecondary vocational programs
- community and junior colleges
- local school administrators
- State Manpower Services Councils
- state commissions for comprehensive postsecondary education planning

- institutions of higher education
- local school boards
- vocational education teachers
- state advisory councils on vocational education

The "group" composed of representatives designated by the ten agencies, groups, and councils is never specifically named in the *Act* or in the *Rules and Regulations*. However, this body has generally come to be known as the *State Plan Group* (or Council, Commission, or Committee). The size of the *State Plan Group* may be less than ten persons when certain agencies do not exist in a state, but will rarely be composed of less than seven or eight persons. The "basic ten" members of the planning group should provide input which reflects needs of the clientele they represent.

The "Other" Agencies, Groups, Institutions, Individuals Who May Be Involved

The Vocational Education Amendments of 1976 (P.L. 94-482) clearly establish improvement in planning as a primary purpose of the *Act*, and that the process of improving planning must include the participation of a broad base of groups with special interests in vocational education. The *Act* states that:

> It is the purpose of this part to assist States in improving the use of *all resources available* to them for vocational education and manpower training *by involving a wide range of agencies and individuals concerned with education and training* within the State in the development of vocational education plans (emphasis added).

The *Act* may, however, effectively preclude the meeting of this intent by prescribing the ten-member *State Plan Group* as the designated group with responsibility to plan, and consider drafts of, the state plan documents. If this is found to be a problem in a given state, it becomes the responsibility of state and local vocational education planners to carefully assess the intent found in the words which are in italics in the quotation above. If a state decides that in addition to the *State Plan Group* it might be desirable to involve other groups, agencies, and councils in planning for, and considering drafts of, the state plan document, then it needs to address the issue of the *appropriate* involvement of these other "entities." As noted by one writer:

To do less than make a total effort to involve those who will be charged with implementation is to do a gross disservice not only to them and the groups, agencies, and institutions they represent, but also ultimately to the students, both youth and adults, who will be enrolled in the programs being designed or improved (Dunham, 1977).

There are a host of groups, agencies and individuals that are closely related to vocational education and training who can provide valuable contributions to the state plan process. These other closely related or involved groups include:

- private vocational schools
- parents of vocational students
- industrial training programs
- vocational student organizations
- apprenticeship training programs
- departments of human resources
- business-industry-labor councils
- local prime sponsors
- economic and community development agencies
- local vocational education advisory councils
- employment security agencies
- state/regional planning agencies
- special education groups
- vocational rehabilitation agencies
- vocational students
- governors' offices of education
- departments of health
- correctional education groups
- education of handicapped groups

This list is not exhaustive, only suggestive. It is important to note, however, that unless at least some are involved in the vocational planning effort of these groups at some level in the process (local, state), it is likely that the intent to "involve (sic) a wide range of agencies and individuals . . ." found in Section 101 of the *Act* will not be met. Implications of and strategies for, for such involvement are discussed in following sections.

In addition to the groups discussed above, groups that are normally less directly involved will be found. These groups cover actual and potential relationships ranging from "need to know" to "who wants to know." They have typically and traditionally been the quiet minority in vocational education planning. They may have a good deal to offer, and may be uninvolved simply because they have not been asked to participate. Keeping in mind the wide range of the "interest quotient," the following are some of the groups, agencies, and institutions which fall into this broad category:

- State Commissions for Women
- Displaced Homemakers Centers
- State/Local Day Care Services Programs
- New Directions for Women/N.O.W. groups
- Ethnic Groups
- Consumer Affairs Groups
- Armed Services
- Community School Service Centers
- "Academic" Teachers
- Private Colleges and Universities

Again, the list is intended to be *suggestive, not complete or prescriptive.* The imagination of the state planner should play on the theme of "typically uninvolved" and give thought to the value of stimulating the involvement of some new and different groups who have contributions to make to vocational education planning. Few groups are likely to turn down the chance to share in the vocational educaton planning effort if they sense a genuine purpose and sincerity which should accompany the overture.

There are, then, three levels and types of groups, agencies, and councils whose required or potential involvement demand attention in the vocational education planning process. First, there is the required *and* essential groups which make up the mandated *State Plan Group.* Second, there is the typically involved or related set of groups which can be regularly involved in the process of planning that leads to the production of the state plan. Many within this level or type may be essential to the development of a responsive plan. This second level is not required by the *Act.* Third, there is the new and emerging level of interested, sometimes disinterested, and most often uninvolved groups in the development of state plans. It may well be highly desirable to include some of the usually uninvolved groups in the vocational educaton planning process.

The involvement of, and contributions from, both the second and third types of groups can be particularly helpful in developing a more responsive and representative plan, and in adding a degree of certainty to the apparent intent in the *Act to*

assure involvement of "a wide range of individuals and agencies concerned with education and training . . ." It is eminently clear that the laws of the land, and the rules of common sense, dictate that *the time of cursory, politically expedient involvement of related agencies, groups and individuals is at an end. The time for openness*—of thought, access and opportunity—*is here*. There are simply too many people—especially students of vocational education—who will benefit from such openness and candor-rich participation to continue a narrow scope of involvement in the critical business of planning for vocational education. To paraphrase an old axiom about education and educators: Planning is just too important to leave (*solely*) to the professional planner alone!

Coping with Input to the Plan

Effective planning is dynamic. The dynamics may run the gamut of listening, informing, initiating, persuading, defending, proposing, protecting, mediating and compromising. All may happen each time a planning group meets together—and may occur on a single issue in a short period of time. Plan managers or coordinators need to be able to handle the dynamics that accompany the process of eliciting input to the plan in both group and nongroup exchanges. This section deals with managing—and/or coping—with the effects of group and non-group input to state plan development.

Dynamics of group planning. When a group or committee convenes in a formal situation for the purpose of providing input to the formulation of the state plan, all or most of the dynamics mentioned above probably will be at work. Rarely are most of the dynamics absent. In order to enhance the usefulness of this expected dynamic interplay in the group, it is essential that members of the group begin the effort from an essentially common base of knowledge and expectations. Participant effectiveness in planning is usually directly related to understanding of time lines; number and dates of meetings; requirements of laws, rules, and regulations; fiscal limits or resources; results of previous plan endeavors; and a clear set of understandings about the purpose of meetings and the responsibilities of the members for their part in the action. Such briefing and orientation is the responsibility of the state plan coordinator and is an essential input for new members of a plan group.

The *State Plan Group,* because it is essentially a small, fixed body, with clearly prescribed purposes, may be, over time, more consistent in its individual and collective behavior than ad hoc groups convened to provide input to the state plan process. If the same persons stay on the *State Plan Group* for several years, the group should become a more effective body in discharging its obligations than if there are frequent changes in the membership. However, in the event there is a large turnover in the membership of the *State Plan Group,* periodic orientation and briefing by the state plan coordinator to new members become givens. Annual changing of many of the planning group representatives is not desirable but is generally beyond the control of the vocational education agency since the designated groups which make up the *State Plan Group* select their own representatives, or the designation is determined by state law.

The *State Board* may have a role in determining the designation process, if applicable state laws do not exist. The state's Attorney General may be helpful in the latter case. Consistency in the membership of the *State Plan Group,* assuming that members are both competent and respond seriously to their responsibilities, should enable the state division of education's plan coordinator to be better informed about the group's dynamics and how to deal most effectively with them.

State vocational education staff bring additional dynamics, needs, and interests to the planning effort. State vocational education staff are not technically excluded from the planning process or the *State Plan Group.* However, prior to the passage of the *Act,* many state staff had more direct involvement in state plan development than at the present time. This partial loss of control over the process of state plan development may serve to improve the quality of staff proposals which come forward to those responsible for the final plan. Perhaps goals formulated by state staff will be clearer, objectives more measurable, activities more doable, budgets more realistic, and benefits and rationale statements less "other worldly" if staff proposals must stand the test of scrutiny on their own impersonal merit.

Observers, visitors, and reactors who choose to, or are invited to attend scheduled meetings of the *State Plan Group* add yet another set of dynamics to the group process. The *State Plan Group* must, in the first instance, decide what its policies will be toward input made by visitors. Uninvited people will likely be asked to make specific recommendations to specific

issues. Again, strategies for responding to visitors' comments must be preplanned. If written comments are made by visitors to the *State Plan Group,* the latter should be sure to acknowledge their receipt or be certain to assign someone the responsibility of acknowledging their receipt. The *State Plan Group* might find it useful to adopt a policy which would, under normal circumstances, assure acknowledgement of receipt that would preclude negotiation or decision at the time the written comments are presented in person. The latter aspect relates to the expected volume of input from visitors with which the *State Plan Group* will likely deal and is intended to suggest efficiency in processing the input during group meeting time.

"Ad Hoc" group meetings for state plan development purposes can add aspects and dynamics which may very well go beyond the realm of reason, if, indeed, the intent of such meetings is to make substantive input which approaches firm decisions and commitments on the part of the prescribed state plan formulators. If *Ad Hoc* groups are convened, careful "planning for planning" should be considered. First, the representatives to an *Ad Hoc* group meeting need to understand that *Ad Hoc* does not mean "official" or "permanent" (i.e., Webster–*ad hoc: for the particular end or case at hand without consideration of wider application*)! Second, the purposes of any *Ad Hoc* meetings must be absolutely clear to all participants. Those purposes should not include making decisions which are properly the function of the *State Board* or the *state vocational agency*. Third, the agency convening the *Ad Hoc* group should call and conduct such a meeting, and be responsible for dealing with the results. Fourth, but not necessarily finally, an agenda of topics and an outline of conference procedures should be reviewed and adopted by the convening agency, and used as a basis for orientation at the first session of the *Ad Hoc* group.

A large group meeting of a one-time nature could involve fifty or more people. If this is the case, and the intent is to allow participants to make substantive input to the plan, the following ideas might be useful in organizing a large *Ad Hoc* group.

A large group might be divided in one or more of the following ways to enhance production of useful input while at the same time capitalizing on the interpersonal dynamics which usually accompany smaller groups of people:

- *task force groups* of three to ten persons may be designated to deal with a specific issue or problem and propose alternative solutions to the larger group. Task forces are disbanded when the specific task with which they are charged is completed.

- *topic subcommittees* of five to fifteen persons may be assigned to design and propose a plan component in essentially complete form for recommendation to the convening body. Subcommittee work of this kind often follows task force work where the topic was chosen as the best alternative, but a full plan component was not required of the task force effort.

- *special interest discussion groups* may be formed to deliberate on a subject in which several people having similar backgrounds and experience have an interest. This approach can result in specification of certain plan elements which are originally in outline form only.

- *diversified interest groups* can be formed to bring together a variety of interests, backgrounds, experiences, and needs in areas where inter- or intra-agency collaboration is an option for program planning and/or delivery. (Dunham, 1978)

Regardless of the type(s) of group division used, (their combination or variation might be used), it is critical to good communication within the planning setting that the work of such subgroups be brought back to the larger, total *Ad Hoc* group as often as possible for review, deliberation, and recommendation by the total *Ad Hoc* group. If the intent of the *Ad Hoc* meeting approach is, in fact, to generate, synthesize, and pass on input to the *State Board*, or *vocational education agency*, this step is essential.

Planning without formal groups. A considerable amount of input for planning in vocational education is generated outside the boundary of a group. Indeed a majority of the suggestions generated for an annual plan update may come from individuals who operate without the benefit of, or the need for, group process. The state vocational education staff member, for example, may generate long lists of ideas for updating the five-year state plan. *State Plan Group* members, as individuals, may generate items for the plan outside the meeting setting. Other related groups, agencies, and individuals not a part of the *State Plan Group* will typically forward input that is generated without group deliberation. The public at large may find it appropriate to make unsolicited suggestions for the state plan and such input invariably comes in the absence of group involvement.

All of this is not to decry nongroup generated input. It is just as important, and often more valuable, than that formulated by a group. Since nongroup generated input is important to the vocational education planning process, it becomes incumbent upon plan developers and planning bodies to make the process useable, attractive, and productive for all who may need to use it. If the *State Board,* the *state vocational agency,* or the *State Plan Group* decide to solicit suggestions for the content of state plans from individuals, the method of solicitation, format, and procedure become important.

It is suggested that there be a formal process, including a set of information response forms, an indication of how comments will be handled once received, and options respondents have for a hearing if their ideas are not used in the plan.

Normally, input will come in written form. A simple fill-in chart could be provided to not only simplify things for the respondent, but to ease synthesis and review of the input once received. The form of written communication going out from the *State Board*, the *State Plan Group*, or the *vocational education agency* should be clear, simple, and designed to attract a response. Information (such as fiscal, supply, demand, facilities, or other program data) sent to potential respondents should be clear, concise, and easily reviewable. The purpose of the request for input should be honest and clear. Promises to include respondents' input in the plan simply because it was sent in should be avoided. More importantly, respondents should be advised if there is a process for hearing their appeal if their input is not selected for inclusion in the plan.

Processing of responses received in the mail can be complex. The processing system, likewise, should be simple and straight forward so that turn-around time is short, and so that the responses will not be scuttled by a poor or biased processing system.

Other kinds of nongroup and informal group planning will occur during the process of developing a state plan for vocational education. Stand-up conferences, hallway meetings, informal visiting, and sharing also influence the planning process. Often, the dynamics of two- and three-person deliberations approach the magnitude of those in much larger groups. Sometimes the result of these informal sessions is an emotional decision about an important plan element.

Clearly, planning cannot occur without emotion; however, the careful planner will moderate the influence of emotional input or decisons with factual data, needs, rationale, and benefits. Because planning has become so increasingly important to effective programming, evaluation, and accountability, it must be accomplished as objectively as possible. It is a hopeful sign, however, that planners do become emotionally involved in their work—and have emotional feelings about products of their efforts. This may be an important step toward reducing the number of plans that are compliance documents and increasing the number that are management tools.

Provisions for official input opportunities. The Vocational Education Act provides for a series of "official" opportunities for the general public and all others to make input to the five-year state plan. For the annual program plan and accountability reports, the *State Board* is required to ". . . conduct a public hearing, after giving sufficient public notice, on the annual planning and accountability report . . ."

The views expressed at such public hearings must be ". . . included in the final plan and report with a description of how such views are reflected in the plan and report; and if particular views are not reflected, then the plan and report shall set out the reasons for rejecting them."

The public hearing on the annual program plan is accomplished after an initial draft of the plan is ready for public review. (For the five-year plan, public hearings were required before the plan was started.) This public hearing may be conducted fairly early in the plan process after the first draft is available, or perhaps be delayed until just before final *State Board* approval of the plan. Some states have indicated their intention to hold early hearings on the first draft, conducted by the *State Plan Group* on behalf of the *State Board*, with another hearing conducted by the *State Board* itself at or near approval time. In any event, it is important that plan developers assure that comments made at these special and official hearings is duly and accurately recorded and that specific staff assignments are made for appropriate treatment in the state plan. While the actual conduct of such hearings is normally a routine matter, state staff and *State Planning Group* members should avoid getting into arguments with persons bringing testimony. A hearing is intended to secure input and comment . . . *not to defend the plan.* Hearing officers may, of course, ask questions of persons who are testifying in order to clarify testimony.

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Some *State Plan Groups* have indicated plans to conduct special hearings after the public hearings to handle the concerns of those whose input was not included in the plan. This strategy is not required by the *Act* but might be useful in some cases.

Finally, all input received, in whatever form, should be acknowledged and responded to in some way. Much good public relations value can be had from a reasonable response to an unreasonable request. Many pieces of input will come, unsolicited, from well intentioned but uninformed people. Taking the time to respond in writing to each such piece, with clear, factual, and considerate reasons why the idea can or cannot be handled will serve to both improve the initiator's knowledge of vocational education and to make a friend for both vocational education and the planning effort. While only the input received from public hearings *must* be reported in the plan, the inclusion of a brief summary of *all* input received and its disposition may also serve the positive purposes of projecting goodwill and providing good information to the several publics interested in vocational education.

Making "Owners" of "Inputters"

A top priority goal for vocational education planning should be to produce a plan which will promote action rather than reaction. Reaction to a plan document is usually found to be in direct proportion to the quality and quantity of persons making input to its design and development. For too many years, vocational education planners have produced their plans from within a narrow frame of reference with little "outside" input. Often, too, true "insiders," such as teachers, have been considered "outsiders" by planners. The tendency of persons treated as outsiders is to "react" to the plan—often negatively. Such negativism stems from lack of involvement—from not owning a piece of the plan. A staff member, teacher, or counselor might not accept an entire plan; however, the chances of their responding to it positively, are directly related to their seeing something in that plan of their own creation . . . an idea generated from a position of membership in a planning group or through another input method. In such a case, the odds for implementation of that piece and those elements of the plan related to it are considerably enhanced. (Dunham, 1978)

Clearly, not everyone who will be affected by a plan can have the ideal kind of input suggested here. However, the idea of making it possible to make input can be a reality if all planning levels can come to subscribe to the concept. Much of the success of such ventures will relate directly to how easy it is to make input from within the context of one's own work or concerns. The ease with which that can occur pretty much depends upon the format of the plan itself, and how clearly that format is communicated to potential respondents. Inputters must know how, when, and in what form to make their input. They must have some believable understanding of how their input eventually sifts into the content of the plan. They need to know that it will be possible to find themselves in the plan in some form: as an activity, as a project, as a statistic, as an amount of money, or as a part of a school district plan that shows up in some of those same ways as a visible part of the state plan. All of this can be possible if the plan format is simple and understandable, and the content believable. If, for example, a Mission, Goals, Objectives, Activities, Costs, Benefits format is used to tie together the content of the plan, then that design should be made explicit, popularized, and used consistently at all planning levels.

Finally, it is worth noting that state plans, treated in a "popular" version can be extremely useful in reaching a wide audience of persons concerned about the accomplishments and plans of vocational education. These versions are usually extracted from the full "Approved" document but the language is usually simpler. A few of these popular versions of the full state plan include a preface or preamble statement which reviews the planning process, the law and its components, and the plan format and content. These popular versions also lend themselves to the "mini-plan" idea—a four to six page brochure-type synthesis of the plan showing highlights and priorities in quite readable, attractive format. Perhaps we can hope that these "popular" and "mini" versions will become the rule rather than the exception. They would certainly contribute positively to creating an atmosphere which invites input—and the input might very well be easier to cope with.

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NOTES

CHAPTER II

DEVELOPING THE CONTENT OF STATE PLANS FOR VOCATIONAL EDUCATION

PREPARATORY ACTIVITIES IN DEVELOPING THE CONTENT OF STATE PLANS FOR VOCATIONAL EDUCATION

The *Act* establishes a limited number of parameters within which state plans must be developed. These parameters are the requirements (federal "strings which are attached") for the acquisition and expenditure of funds under the law. The *Act* was written to accomplish specific purposes; and a thorough understanding of the legal requirements of the *Act* is an essential requisite for developing state plans for vocational education which will be approved by the U.S. Office of Education. Equally important in developing state plans for vocational education is a comprehensive understanding of state laws and policies that impact on vocational education and the content of state plans.

This manual reviews only the most important federal requirements for state plans, and all persons involved in the development of these plans are encouraged to familiarize themselves with all of the details of the *Act*.

Planning for the Distribution of Funds

Section 106 of the *Act* makes clear that the expenditure of federal funds for vocational education is restricted to three main purposes. These purposes are:

- preparing students for work
- assisting students to successfully complete programs
- assisting students to make informed and meaningful occupational choices

These three purposes guide the formulation of decisions about the allocation of funds under the *Act* to local education agencies and other eligible recipients.

Federal funds under the *Act* are available to the states for research, exemplary programs, curriculum development, guidance and counseling, inservice and preservice training of education personnel, and grants to overcome sex bias. These uses of federal funds are designed to improve vocational education programs and supportive services in order to more effectively achieve the three purposes for the expenditure of federal funds. The *Act* does place limits on a state's freedom to distribute funds to local education agencies and other eligible recipients.

Section 106 of the *Act* specifies that funds cannot be distributed on a per capita or equal percentage basis. The state must, in considering the approval of applications for funds under the *Act*, give priority to those applicants who:

- are located in economically depressed areas and areas of high unemployment which are unable to provide the resources necessary to meet the vocational education needs of those areas without federal assistance
- propose programs which are new to the area to be served and which are designed to meet new and emerging employment needs and job opportunities in the area (and where relevant, the state or nation)

The bases for the distribution of funds to applicants who are approved for funding are to be made by the state based on economic, social, and demographic factors relating to the needs for vocational education among the various populations and areas of the state. The two most important factors in determining this distribution of funds to local education agencies are the *relative financial ability* of such agencies to provide the resources necessary to meet the need for vocational education in the area they service and the *relative number or concentration* of low-income families or individuals within such agencies. In the case of other eligible recipients, the most important factors to be considered by the state are the *relative financial ability* of such recipients to *provide the resources* necessary to initiate or maintain vocational education programs and the *relative number or concentration of students* whom they serve *whose vocational education imposes higher than average costs.* Italics are used to highlight areas of concern in the distribution of funds to eligible recipients that are obviously difficult to operationalize. Many states continue to grapple with the problem of defining an equitable distribution formula compatible with federal requirements. This manual offers no solutions.

Other restrictions on the distribution of funds under the *Act* are:

- that funds under the *Act* cannot be distributed if the net effect will be to supplant local and/or state dollars

- that such funds cannot be distributed to local education agencies if they do not maintain a level of expenditures consistent with historical funding patterns (However, funds may not be denied solely because such recipients are unable to pay the nonfederal share of the costs of new programs so long as such recipients are making a reasonable tax effort.)

Section 110 of the *Act* gives the percent of funds under Section 103 of the *Act* to be used to pay the vocational education costs for disadvantaged and handicapped students, and for students enrolled at the postsecondary and adult levels. Likewise, each of the sections dealing with the distribution of dollars specifies the categories to be considered for the allocation of vocational education funds.

In summary, before the plan can be prepared, requirements of eligibility for receipt of federal vocational education funds must be determined, a distribution formula must be developed, and the gross dollars available for distribution under Sections 120, 134, 140 and 150 of the *Act* must be determined.

THE PLANNING PROCESS

Planning is a more or less systematic process of organizing and assigning resources (people, time, dollars, and tangibles) and sequencing activities to achieve or influence some desired and possible future(s). A systematically developed plan typically includes a number of components which respond to five general questions:

- Where are we?
- Where are we going?
- How will we get there?
- How will we know if we got there?
- Whom do we involve along the way?

In the case of vocational education planning these five general questions translate to:

- What is the vocational education context within which the plan is developed?
- What are the system's major needs which need to be reduced or resolved? What goals, objectives, outcomes, and benefits should be established?

- What activities and resources need to be brought to bear to achieve the anticipated outcomes for the vocational education system?
- What evaluation information needs to be secured to determine if anticipated outcomes and benefits have been achieved, and to provide a basis for recycling decisions?
- What groups, agencies, and councils are to be involved in the formulation of state plans so as to assure that such plans are broad-based?

Describing the Context for Developing the Content of the Plan

The *Act* does not require that state plans for vocational education include a description of the vocational education context within which the plan has been developed. There are, however, at least two reasons for states to consider including such a description.

First, an explicit description of the vocational education context within which the plan is to be developed provides planners with a frame of reference for formulating logically consistent vocational education needs, goals, objectives, activities, and the rationale for their selection .

Second, this common frame-of-reference upon which the state plan for vocational education has been developed can serve to more clearly focus and clarify debate between critics and defenders of a state plan.

A format for describing the vocational education context might include:

- *the purposes and benefits* of the vocational education system (e.g., to guarantee employment, compete for jobs which are available, etc.), the reasons for its existence, and the philosophical basis upon which vocational education is offered
- *the unique features* (boundaries) of vocational education which set it apart from other education and training systems
- *the roles and functions* (by law and tradition) of the *State Board* and the *state division of vocational education* and the *relationship* of these agencies to local education agencies and other eligible recipients

- *the relationships* (by law and tradition) of the *State Board* and the *state division of vocational education* to other agencies concerned with vocational education and training both in the public and private sectors

Formulating Needs, Goals, and Objectives—Where Are We Going?

Generating needs. The *Act* requires that the five-year state plan address at least three kinds of needs. These three kinds of needs are:

- program growth needs [Sections 106(a), 107 (b) (3) (B), and 110 (a) (b)]
- program quality needs [Sections 103 (c) and 130]
- program support needs [Sections 208 (b) (1) and 111 (a) (2) (B)]

Program growth needs. Vocational education has continued to receive reasonable financial and political support, in part, because it has kept its programs and enrollments tuned to the requirements of employers for workers and the needs of students for job skills. There are at least three sources of data that are typically used to determine program growth needs. These sources of data include:

- employment data (supply-demand data by job title)
- student placement and follow-up
- student interest data

In determining the existence and extent of program growth needs (i.e., number and type of programs, enrollments in these programs, and number of program and enrollment levels) which will meet the employer and student requirements in the future, it is helpful to have a clear understanding of the purposes of the state's vocational education system. This understanding of purposes is essential to the selection, interpretation, and application of available employment data in determining program growth needs.

If, for example, the basic purpose of a state's secondary vocational education program is to enable students to be *more competitive* in securing initial employment (in any occupation) than cohorts receiving other forms of secondary education, the selection of an appropriate employment data base for generating program growth needs will differ from one whose basic purpose is to *guarantee* employment in the occupation for which students trained.

In the first instance, employment data are useful but not essential for determining program growth needs; instead, evaluation findings of the relative success of vocational education programs in achieving the basic purpose are more relevant.

In the second instance, guaranteeing employment requires the selection and application of the best available employment data about current and future needs of employers for workers in different occupations. Program growth needs can then be determined by assessing the discrepancy between current programs and enrollments and current and future human resource requirements.

The *Act* also requires that the needs of groups and individuals be balanced with employers' needs for workers. Thus, in determining program growth needs it is important not only to assess human resource requirements, but also entry level wage rates, working conditions, restrictive hiring practices, and other conditions which may affect the willingness of program completers to accept employment and of employers to provide access to jobs. Other factors need to be considered in selecting appropriate employment data bases and these are dealt with in the last section of this chapter.

Student placement and follow-up data can be of great value in determining program growth needs and in validating available data about current needs for workers. Needs for workers can be presumed to exist for those occupations in which students are easily placed. In instances where employment data and placement data are inconsistent (few apparent vacancies but easy employment), additional analyses of placement and employment data will need to be conducted to decide whether the observed high placement rates are stable, represent a special relationship between schools and employers which is typical or atypical, and whether program growth (new programs, expanded enrollments) is likely to adversely impact on current high placement rates.

Follow-up data can be of great value in making decisions with respect to program growth needs. While employment data provide an index of the current and future needs for workers, follow-up data tell what actually has happened to students who have become available for employment in the past. Follow-up data can provide information about whether students continue to remain in the occupations for which they were trained, stability of employment, occupational mobility both vertically and horizontally, economic returns, which groups of students have the most or least success in employment and in which programs, etc.

Need for program growth as evidenced by current and anticipated employment needs should be balanced against the experiences of students in those occupations for which students had been trained. The process of balancing employment data and follow-up data is a complex one. Criteria for decisions about program growth needs which balance employment data and placement and follow-up data, should be based, in part, on the purposes and philosophy for vocational education to which the state agency subscribes.

Evidence of actual or potential student interest is another important source of data for determining program growth needs. Evidence of student interest for vocational education are typically secured from: (a) student interest surveys; (b) student dropout and leaver data; (c) documented reports from support services personnel (e.g., counselors); and, (d) applications and/or enrollment reports from other public and private vocational education and training agencies and institutions.

Longitudinal data about student interest can provide one indication of the trends in student interest in vocational education. The extent of the trends in student interest can influence decisions about how far to expand programs in terms of number of programs and training stations. The trends in student interest can provide a useful index of the probability that new or expanded programs are likely to attract the numbers of students called for by any anticipated program growth.

Program quality needs. Identifying program quality needs assumes that there is a concensus as to what is meant by "quality." Often, or perhaps in most instances, this is not the case. There is not yet any general agreement as to what features of programs provide quality, or improvements in quality. There is still no general agreement about the outcomes of programs which shall serve as a basis for distinguishing a "quality" program from one of lessor or no quality. The problem of defining quality is

made even more complex by the fact that the characteristics which students bring to a program (e.g., intelligence, temperament, language proficiency) also influence program outcomes and affect any attempts to measure quality.

In spite of these problems in defining program quality, decisions about program quality needs must still be made. At least three sources of data can establish program quality needs. These three sources are:

- evaluation reports
- federal priorities
- research findings

Evaluation reports by program supervisors, fiscal auditors, business and industry persons, the state advisory council for vocational education, and U.S. Office of Education representatives and comments from local education agencies and laypersons interested in improving vocational education can be reviewed to arrive at a pool of candidate program quality needs.

The problem faced by state plan developers is to reduce the pool or program quality needs which have been proposed for inclusion in the state plan to a manageable number whose resolution is most likely to produce desired future vocational education outcomes. The process of reducing the pool of proposed quality needs can be aided by developing a set of criteria for selecting the most pertinent program quality needs to be addressed in the state plan. These criteria could include: (a) reasonableness of achieving needs reduction within the time-frame covered by the plan; (b) relative economic efficiencies for dealing with proposed quality needs; (c) potential impact on the vocational education system, as a whole as a result of needs reduction; and (d) potential benefits to students in school and upon program completion.

Program "support" needs. There are numerous program support needs that should be considered in developing the state plan for vocational education. These needs include:

- professional development--pre-service and inservice
- exemplary program development

- curriculum development
- research
- requirements for adequately administering and supervising implementation of the plan by state and local level vocational education agencies

Program support needs for inclusion in the first five-year state plan were probably generated by most states on a less than completely systematic basis. Establishing a process of systematizing and documenting program support needs, now, could prove to be of great value to states when they prepare their next five-year state plan.

Formulating goals and objectives for inclusion in the state plan. Goals and objectives for inclusion in the state plan for vocational education should be developed from, and integrally related to, the program growth, quality, and support needs which were previously determined.

Goals are broad statements that give direction to the resolution of the needs. The state plan should specify the *State Board's* best thinking about what should be done in the next planning period to deal with the program growth, quality, and support needs of the state's vocational education system. Goals prepared in this manner set the framework for the formulation of process and outcome objectives, which in turn, serve as the basis for rational decisions to prioritize expenditures and determine staff resource allocations and activities.

Goal statements can best be customized by each state. They cannot be prepared at the federal level with any degree of applicability to all states because of the unique needs of the different states. Sufficient time must be devoted to formulate state goals for vocational education which are potentially most expedient for bringing about a resolution of the identified needs.

Table 2 depicts an example of a format for stating goals in relation to needs. There are no ideal ways of formulating goals or formatting them in a plan.

Once goals have been established for the vocational education system for inclusion in the five-year state plan, process and outcome objectives will need to be prepared. *The Objectives operationalize the direction established by the goal statements.* Each specific objective is formulated in response to the general direction of the goal to which it applies. Several objectives may be formulated for a single goal.

Process objectives are operations and activities that are carried out in support of goals. For example, if the goal is "To increase the availability of vocational education in all areas of the state in response to a need for more equitable geographic availability to potential students" an accompanying objective might be, "To secure legislative approval of new or liberalized policies regarding the establishment of new vocational education facilities." Outcome objectives indicate some quantitative statements of goal achievement (e.g., nine new facilities will be built).

There are essentially two major problems in developing process and outcome objectives. The first problem is to reduce the number of statements of objectives to a minimal number since each objective implies the allocation and availability of anticipated resources. The second problem is to establish outcome objectives which are reasonably attainable. There is no ideal solution to setting realistic targets. Judgments and compromises will have to be made between desirable achievements and achievements that seem reasonably attainable.

Statements of objectives must be customized to the specific context of each state. Table 3 depicts one of many formats for presenting outcome objectives.

In Table 3, the program growth objective is to increase enrollments in Food Management by a total of 619 students in the last year of the plan as compared to the first year (76-7, 1181 students and 81-2, 1800 students). In this format each individual vocational education program is listed. Many such objectives can be prepared in table form and, therefore, do not need to be presented as separate statements in the plan.

Other objectives lend themselves to a different kind of format. Table 4 provides one example of a different kind of format for presenting objectives.

Table 2

FORMAT FOR PRESENTING PROGRAM GOALS

Need:	Labor market needs exist in "X" occupational specialty areas and student interest is sufficient to promote a growth of programs in these areas within the planning period.
Goal:	New vocational education programs will be implemented and/or existing ones expanded to meet the demonstrated interests of potential students and the employment requirements of business and industry.

Need:	Disadvantaged and handicapped students have been identified who cannot succeed in regular vocational programs and therefore need assistance to complete their vocational education.
Goal:	Special programs and/or services will be made available to accommodate the needs of the disadvantaged, and physically, mentally, and/or emotionally handicapped students who cannot succeed in regular programs.

Table 3

A FORMAT FOR PRESENTING OBJECTIVES

ESTIMATED ENROLLMENT OBJECTIVES BY PROGRAM, SEX, AND RACE

USOE CODE	Program	Enrollment			Female Enrollment			Minority Enrollment		
		76-7	77-8	81-2	76-7	77-8	81-2	76-7	77-8	81-2
090203	Food Mngmt	1181	1300	1800	306	400	600	450	470	550

Table 4

AN ALTERNATIVE FORMAT FOR PRESENTING OBJECTIVES

Need:	Disadvantaged and handicapped students have been identified who cannot succeed in regular vocational programs and, therefore, need assistance to complete their vocational education.
Goal:	Special programs and/or services will be made available to accommodate the needs of the disadvantaged and physically, mentally, and/or emotionally handicapped students who cannot succeed in regular programs.
Statement of Objective:	Disadvantaged funds will be distributed to ninety-five LEAs by approved formula to provide supplemental services to enable students who cannot succeed in regular programs to successfully complete their programs.

Operationalizing Goals and Objectives—Developing a System for Prioritizing the Allocation of Funds—How Will We Get There?

A problem that each agency staff must solve is to determine the basis on which all budget allocations will be made. The state mechanism to make these decisions can be very simple, such as a first-come, first-serve statement, or a policy that those funded last year and needing to be continued will receive first priority for the coming year; or the policy can be very complex, such as a formal regression analysis technique. The state plan developers must have the decision-making tools in order to prepare the plan. Since the plan must show projected allocations of funds, the mechanism for decision making must be developed.

The following discussion describes separate factors in addition to those which are mandated in Section 106 of the *Act* and which are useful in developing a system for prioritizing the allocation of funds to eligible recipients. The factors will be mentioned only briefly in the following section to present a focus.

Priority decisions based on the local application. One important criterion that some states use in deciding program approvals is the interest of the local education agencies (LEAs) in implementing programs. If LEAs have requested programs and they have documented the need for them, the state needs to give high priority to the requests. There is consensus that the key to a quality state plan is active systematic planning on the part of each local education agency.

Priority decisions based on state labor market data. Congress, through the *Act,* expected that state plan developers would make priority decisions about program approvals based also on the best available employment demand/supply data. The assumption is made that where a request is made for a program with high net labor demands, then that request would be a high priority request. Of course, the reverse situation is also important.

Another assumption is that local education agencies will be actively encouraged to launch programs of high labor/market standing. It is also assumed that approvals will not be given to program development where local/state market projection for job prospects are poor.

Priority decisions based on a follow-up of graduates each year. The expectation is that where the level of student placement falls below an acceptable level (not defined), then additional programs will not be approved in that speciality, and, also, ongoing programs will possibly be discontinued.

This criterion must be used carefully in deciding priorities. It is possible for vocational educators to get trapped in adjusting to the annual cyclical effect of the state and/or national economy. To do so would mandate terminating and starting a great number of programs each year. This is not an efficient procedure or even practical, given the current delivery system configuration. However, any long-term (perhaps four years or more) changes in the labor market, net demand for human resources ought to be responded to as quickly as is practical, while at the same time protecting the interests of the students who are enrolled.

Priority decisions based on a student accessibility factor. The *Act* is clear in its mandate that students have access to vocational education programs. Handicapped, disadvantaged, and female students are particular centers of focus. The expectation is that regardless of whether students live in the rural or urban areas or whether they are from impoverished backgrounds, vocational programs that match their interests, and aptitudes will be available to them.

The agency must make a preliminary analysis of the accessability of the overall delivery system of vocational education to all kinds of students before the plan can be developed. An overview of the location of vocational programs and an assessment of the adequacy of mix of vocational programs at each institution is part of the analysis needed. Where gaps in the adequacy of the system are discovered, the expectation is that program requests to take corrective action will be given high priority.

Priority decisions based on coordination with other delivery systems. The *Act* mandates that vocational education plan developers consider other human resources delivery systems when determining the priorities for funding. Programs offered by prime sponsors under the Comprehensive Employment and Training Act (CETA) are particularly mentioned, but programs sponsored by other federal agencies, e.g., vocational rehabilitation and perhaps even private schools, should be given consideration. The expectation is that coordinated, and thus more comprehensive education and training offerings, will be made available to potential students and that unnecessary duplication or other evidence of unnecessary competition will be eliminated.

Priority decisions based on economic efficiency factors. Most local education agencies, given the right budget condition, would prefer to offer a complete array of vocational education programs and related course offerings. However, the ability of local, state, and federal governments to supply the necessary funds has and continues to be very inadequate. No substantive increase, for example, has been received from the federal government in recent years; yet, unprecedented high inflationary cost factors have been in force. The net result is that the real value of the vocational dollar has decreased substantially.

Given the realities of revenue and cost imbalances, state agencies are forced to determine which are the most economical decisions when prioritizing programs and budgets. Recognizing the goal of a total array of offerings at each institution cannot be met, hard choices must be made in distributing scarce resources.

Priority decisions based on program standards. Many states cannot utilize program standards as a basis for priority decisions in approving programs because of the lack of authority to do so. Some states can do so. Colorado, for example, makes judgments about eligible recipients' ability to adequately supply equipment, facilities, supplies, and other factors such as student/teacher ratios, that are presumed to be important to program quality and to program outcomes. The assumption is that programs that cannot meet these standards should be denied a high priority rating.

Methods of utilizing the priority data. As requests from local education agencies flow into the state agency, each of the above factors can be applied one by one to the application and an overall judgment can be made about the level of priority. Some states, Colorado, Oklahoma, and Wisconsin, for example, have developed regression analysis or other formal priority weighting schemes to suppply priority ratings. Whatever the system used, management must decide on the factors to be applied and also on the weighting of each factor in the overall priority making system.

A Supporting Section for the Plan

A section in state plans might be developed to explain many of the procedures and processes which were carried out. An abstract of the process and procedures used in developing the content of the state plan can serve to give the plan greater credibility. Suggestions for topics to be included in such a supporting section of the state plan are:

- procedures for gathering data which form the basis for decision making
- the local application
- the labor market need, supply/demand data
- program data
- teacher/instructor data
- student enrollment/follow-up data
- procedures for defining program priorities
- ways the agency arrives at decisions once it has collected and processed the data

USING EMPLOYMENT DATA IN VOCATIONAL EDUCATION PLANNING

This section of Chapter II provides an overview of the use of employment data for vocational education planning. The *Act* places a very heavy emphasis on the use of the best available employment data for state planning, particularly with respect to setting measurable outcomes for: (a) instructional programs; (b) enrollments in these programs; and, (c) the mix of instructional programs by instructional level and type of institution.

In order to assist the states in gaining access to the best available employment data for vocational education planning purposes, Congress has mandated the establishment of a National Occupational Information Coordinating Committee and State Occupational Information Coordinating Committees. The *Act* states that the National Occupational Information Coordinating Committee has three purposes: (a) to improve coordination between, and communication among administrators and planners of programs authorized by the *Act* and administrators and planners of other federal, state, and local agencies concerned with the use of program and employment data; (b) to develop and implement an occupational information system which shall include data on occupational demand and supply based on uniform definitions, standardized estimating procedures, and standardized occupational classifications; and, (c) to assist State Occupational Information Coordinating Committees. State Occupational Information Coordinating Committees are charged with the responsibility of implementing an occupational information system to meet the common needs for planning and operation of vocational education programs and training programs under the Comprehensive Employment and Training Act.

Hopefully, the implementation and operation of these National/State Occupational Information Coordinating Committees will produce the data and the climate for planning vocational education programs which are fully responsive to the needs of people for job skills and the needs of employers for trained workers.

States have, for many years, used employment data with varying degrees of success to plan and approve vocational education programs. The 1968–70 Oklahoma Training Information System Project in Oklahoma was the first documented effort to systematize the use of employment data for vocational education planning. Other, less formal efforts by many states have been identified that date as far back as 1917. With this experience base, it would seem that states should be able to readily implement the *Act* requirements that employment data should be used in developing state plans for vocational education.

Employment Data Currently Used in Vocational Eduction Planning

The ideal employment data base for use in vocational education planning has not been clearly identified. Planners, therefore, use a variety of employment data which are available and/or easily assembled. In defining a useful employment data base planners must concern themselves with four problem areas, the data base details, the definition of planning regions or areas, planning periods, and the quality and availability of employment data. These four problem areas in selecting an employment data base are not isolated but are interrelated in nature. For example, the level of detail and the scope of data about employment to be used in planning are affected by the quality and availability of such data. There is not, and cannot be, a set formula for the employment data to be used by every state. This is because each state has its unique problems related to the quality and availability of employment data.

Data base detail. There are several levels of detail in the data bases about employment in general use today by vocational education planners. Some vocational education planners use gross employment data (e.g., there are 4310 welders employed, 136 electronics technicians employed); other planners use new job data (e.g., there will be 148 new carpenter jobs available next year); still others use job vacancy data (e.g., there will be 148 carpenter jobs next year plus there will be a need to replace 152 carpenters who will die, retire, etc., for a total of 300 job vacancies); a fourth group uses the difference between job vacancies

and new workers available (e.g., there will be 300 job vacancies and 150 new workers for a net need of 150 additional workers next year); and a final group of planners uses the ratio between job vacancies and the availability of new workers (e.g., there will be 2.0 job vacancies per each available new worker next year).

Each of these kinds of employment data has advantages and limitations for vocational education planning. Generally speaking, as the level of data complexity increases, data accuracy and availability decrease. Gross employment data are probably the most accurate data since they deal with a count of what exists. Job vacancies and new worker data probably are the least accurate, since they deal with a wide variety of factors which are projected into the future. On the other hand, the more complex data probably have the most meaningful range of applications, and can solve more of the vocational education planners' problems.

Apparently there is some form of evolution in data base requirements. This evolution is keyed to both time and expenditure of resources. In other words, those states which have expended the most resources and have been attempting to systematize employment data for the longest periods of time use more complex data bases. This is not surprising, since the development and application of complex data bases cost money. The fact is, however, that most vocational educators would prefer the complex data bases if resources were available to generate them.

Support for the use of one complex data base, i.e., the ratio between job vacancies and new workers available, has been found in at least three states. In these states, a high positive correlation between placement rates and the number of job vacancies per new workers has been identified. When the number of jobs per worker decreases, the placement rate decreases. This ratio speaks, of course, in general terms. There are obvious intervening variables such as salary, hiring practices, etc.

In Colorado, for example, research indicates that maximum placement rates for program completers can be expected when there are four or more job vacancies for every new worker. There will be a gradual decline in placement rates as the number of jobs per new worker decreases to one and one-half. At this point, placement rates begin to decrease more sharply.

This empirical finding may result from a variety of factors. Two such factors are: (a) students are trained in one geographic area, and jobs are available in other geographic areas; and, (b) students graduate at one time, and jobs are available at another time. The list of factors is long. If the purpose of vocational education is to place students, then, it would seem that the use of the ratio between future job vacancies and future program completers[1] is a good planning tool. This is the assumption made here.

Defining planning areas. The second major problem in defining a data base useful for matching student output and employment needs is the definition of planning areas. On one end of the spectrum, states plan on a local school district basis. On the other end of the spectrum, statewide planning is used. Somewhere in between is regional planning. Obviously, the choice of vocational education planning areas has serious implications for the selection of employment data.

Does the planner opt for local employment data? Are regional data about employment better? Are statewide data about employment the only real alternative?

Requiring local data about employment assumes that it is best to treat the local district as an isolated area. In fact, there are very few local areas that are isolated in an economic sense. Many students are mobile when they must be. Research in Kansas indicates that students will travel as far as the first related job available to them. In western Kansas that might be Wichita or Denver. In many areas in the United States, vocational education would not be offered if it had to be based on local district job vacancies. There simply are not enough employment opportunities in many communities to justify any training program.

Employment data applicable to regions of the state can be useful in some instances. For example, regional employment data are useful where a state has a number of identifiable Labor Market Areas and Standard Metropolitan Statistical Areas. Some states can logically plan almost exclusively on a statewide basis. These states will usually have one or several urban centers which draw workers from the remainder of the state which is sparsely populated.

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[1]This conclusion argues for the need to be able to project future enrollments and completions by instructional program. The effective use of employment data for vocational education planning requires the availability of educational and demographic data systems upon which projections of future enrollments and completions can be based.

The decision between using regional or state data bases, or both, will depend on many geographical, political, demographic, and economic considerations. Thus, coordinated interagency planning and decision making would be a desirable goal even if it is difficult to implement.

A related problem is planning for urban areas that are located on or close to state boundaries. How should Kansas and Missouri do vocational education planning which focuses on the Kansas City Area? Should they each plan in isolation? If they plan together, how should jurisdictional problems be solved? If the states do decide to plan together in a cross-state boundary situation, educational and employment data bases will need to be compatible.

Defining planning periods. Another planning problem which has implications for selecting an employment data base involves planning periods. Although the federal government requires a five-year plan, it is possible and even probable that states might want to examine planning periods of less than, or more than, five years.

It seems safe to say that the longer the projection period, the greater the possible error in both employment data and in the educational data to which it relates (e.g., projected enrollments, completions). On the other hand, five years seems to be a reasonable period considering the reaction time of vocational education. It takes time to start a program and graduate students. Also, there is usually a large investment in equipment which cannot be thrown away in a couple of years. Perhaps a five-year planning period and a corresponding five-year oriented employment data base are most practical.

Employment data quality. The quality of data is another major problem. As mentioned, there are a wide variety of employment data available to the planner. Some data will have gaps. Some data will not make good sense in light of experience. The planner must still select the best of the available employment data and make decisions which take into consideration the limitations of the available employment data.

Assembling Employment Data

The employment data needed for vocational education planning can be separated into two distinct categories: demand data (projected job vacancies) and supply data (projected new workers). The supply category can be separated further, based on source of supply.

The National/State Occupational Matrix System is based on data about employment in over 400 detailed occupational categories cross-classified by 201 industrial sectors and 6 class-of-works categories. Tabulations of employment from data obtained from the Census of each state serves as the basis for the Matrix and for the development of projections of occupational employment.

In 1972–3 the U.S. Department of Labor, Employment and Training Administration and State Employment Security Agencies made major efforts to develop employment projections about job vacancies at least to the year 1980. The results of these efforts are available in printed form from the State Employment Security Agencies which participated in these efforts.

Supply data are a much more serious problem. Supply of workers available for jobs at any point in time is influenced by the number of new entries into the labor force as well as by those leaving the labor force. Figure 4 depicts categories of entries and separations.

There is not a clear definition of what constitutes supply. For example, do the trained unemployed consitute supply? Do the skilled unemployed count as supply? If so, supply for what jobs? Since workers in the United States are free to quit one job and take another and since employers have the right to fire employees for a number of reasons, will there always be a "float" of skilled workers who are temporarily unemployed? If there is and will be a "float," should this "float" be considered as supply or should it be considered as a natural status for a predetermined proportion of workers? The problem of how to deal with the "float" is perhaps one which should be addressed by the National or State Occupational Information Coordinating Committees.

Vocational education agencies typically consider supply to consist of persons who complete a vocational education program and are available for the labor market. Some states also include as supply program completers from public and private vocational schools, students from nonvocational training such as agriculture programs at colleges and universities, apprentices, and net migration.

What elements in the public vocational training data base are most useful for estimating supply from this source? Consider the situation in vocational education realistically. First, not all enrollees complete their training. Second, not all completers are

available to take jobs. Supply from public vocational education really consists of those enrollees who have received a marketable skill (completing programs or leaving prior to completion) and are available to take jobs. Although states report enrollments, completion, and availables for employment to the U.S. Office of Education, these supply data are not always accurate or in sufficient detail for planning purposes. The Federal Vocational Education Data (and Reporting System) mandated by the *Act,* has the potential for improving this state of affairs. Accurate, detailed educational supply data have usefulness for state, interstate, and multi-state (regional) vocational education planning.

The private (proprietary) vocational school data base is subject to similar parameters. The real supply consists of students who have obtained marketable skills and are available for employment. Proprietary school data, however, may be much more difficult to obtain. Consider the following three examples taken from actual state situations.

State X controls the approval of proprietary programs. Part of the approval is based on annual reporting. The schools are required to report enrollment, completion, and placement data annually for each program operated. There is no data collection problem in this state.

State Y controls the approval of proprietary programs; however, there is no reporting requirement associated with the approval process. The state surveys schools for planning information. In the past, some schools have not cooperated; hence, it has been necessary to make estimates to fill data gaps.

State Z does not control proprietary schools through the state educational agency. This control has been placed under the state regulation agency. Planners have contacted the state proprietary school association and have explained the problem. The association has concluded that all parties involved could benefit from cooperative planning. At this time, the proprietary school association surveys its members and reports to the state education agency on a voluntary basis. In turn, the state makes every effort to eliminate duplication of proprietary and public vocational education.

If all other arrangements fail, the planner has access in some states to one final source of data on proprietary school enrollment, completion, and follow-up data. The state approving agency for the training of veterans collects this type of data on

approved (veterans') programs. All students, not just veterans, are surveyed and, therefore, the data base is adequate for programs which are reported.

Migration of persons in the work force into and out of the state and into other jobs is a major supply factor in some states. Unfortunately, current data that meet a vocational planner's needs are rarely available. Although every state has at least one and usually several agencies that work with employment and with population trends, these agencies usually deal with population in the aggregate.

Many states have a Bureau of Apprenticeship or an Apprenticeship Council. These organizations control approved apprenticeship programs. They also keep good records. Unfortunately, they don't control all apprenticeship training in the state. To obtain apprenticeship data, ask these agencies to estimate the apprenticeship training in the state by occupation. Usually, when the planner explains how the data will be used, excellent cooperation can be obtained. Be sure to emphasize the necessity to include that apprenticeship training which is not under the control of the bureau or council.

Data on students who receive vocational preparation in nonvocational programs present unique interpretation problems. Which college and university graduates compete with vocational students for particular jobs? Which secondary students in nonvocational training are prepared for employment and for particular jobs? Further, what percent of these students will seek employment related to the training?

Vocational education planners might want to consider determining which higher education majors compete with vocational training. Perhaps expert advice from state service area supervisors will be required. Some examples of competing majors are nursing, agriculture, and accounting.

When the competing majors have been determined, the planner could total the number of graduates in each major in the state and contact the colleges and universities to get their estimates on how many or what percent of the graduates find employment in occupations for which vocational education students are being prepared. These estimates are necessary to determine real supply in the same sense that real supply from public and private schools was defined.

Secondary students from programs such as useful home economics, typing, industrial arts, etc., may have received vocational skills and, therefore, may be supply. If they are considered to be supply, then the planner must ask at least two questions—first, "What percent of the students who receive such training will be available for jobs?" and, second, "For which jobs are they supply?"

Some states have taken the position that secondary students in typing, industrial arts, etc., have received a good general education but are not qualified for specific jobs. In this case, secondary students who have not had vocational training are not considered to be trained supply.

Other states have taken the position that typing, industrial arts, etc. do provide job skills and that a small proportion of students from these programs are real supply. The difficulty, of course, is determining what that small proportion is in terms of some percentage. Oklahoma is one of the states that takes this latter position and has surveyed typing students, for example, to estimate the percent who will seek employment in a clerical field.

Additional support and supplemental data on supply can be obtained from a variety of agencies. It would probably be wise to contact licensing and certifying agencies in the state. Examples of agencies that have been known to have good data are the Highway Patrol, the Board of Nursing, the Board of Cosmetology, and the Board of Barber Examiners.

These agencies know facts such as how many persons have been licensed in the past year, how many licenses have been accepted from other states, how many licenses have been transferred to other states, and even how many persons are working in the field presently. Regardless of the records they keep, their advice on specific occupational trends is often of very high quality. The planner should consider any advice received from these sources carefully.

In summary, supply data are available in most states in some form. The planner's job is to search for and identify the best available data sources about supply and to determine the best approach to data interpretation. State Employment Security Agencies are usually the best source of demand data. Supply data, on the other hand, must be gathered from a variety of sources

including public vocational education, proprietary vocational education, migration, apprenticeship training, and graduates from nonvocational training programs who compete with vocational students for jobs.

Organizing and Analyzing Data

Even if a planner has determined which data about employment are needed and available, and has assembled and interpreted the elements which make up a supply/demand data base, the job is still less than half completed. The data must be organized and analyzed. Because the data were collected from a variety of sources using a variety of different data classifications, an interface or grouping of data into meaningful clusters is extremely difficult. Public vocational training data are reported using program titles and Office of Education program codes. Private training may be reported using Office of Education codes but also may be reported using local program titles. Demand data and migration data may be reported using Census Occupational Codes. Nonvocational training may be reported using occupational titles which do not necessarily correspond to the titles used by the Census. How do the data fit together? Is there some scheme for "interfacing" the data?

The problem of interfacing requires that crosswalks be established between U.S. Office of Education program codes, *Dictionary of Occupations* codes, and Census codes. The establishment of crosswalks are complex and require tailoring to individual circumstances of the states.

Based on the experiences of states who have made the effort to interface supply and demand data, there is one overall rule which is followed in this matching or interface process. This rule is as follows:

- Several program codes versus one Census title, several Census titles versus one program code, and several Census titles versus several program codes are acceptable and even necessary matching schemes for any single cluster of data.
- Prorating of data from a single title or code to several clusters is totally unacceptable.

This rule is based on the fact that, from a planning standpoint, there is no logical way that demand from a title or supply from a program can be prorated.

An example of interfaces or matches that are meaningful are found in Table 5. Other formats are, of course, acceptable.

Table 5

EXAMPLES OF INTERFACES BETWEEN
VOCATIONAL PROGRAMS AND OCCUPATIONS

Vocational Program Code and Title		Census Occupational Title
170301	Auto Mechanics	Auto Mechanics
041700	Real Estate	Real Estate Agents and Brokers Real Estate Appraisers
040700 172900	Food Services	Restaurant, Cafeteria Management Waiters Cooks Counter and Fountain Workers Waiter Assistants

Once the matching between programs and occupations has been achieved, data about supply and demand should be integrated into an interface. Table 6 depicts the crosswalk or interface between U.S. Office of Education program codes, Census Occupational Titles, and supply/demand data. Census Occupational Codes could have been included.

Probably most states are not ready for more than a simple analysis of demand and supply. The simple analysis looks at the difference between demand and supply figures. From Table 6, it might be deduced that there was a net need for 1678 horticulture and related students and 419 mass media technology students, while there was an oversupply of 986 agriculture resources and related students and 775 broadcasting students. These figures should and would have implications for planning.

A more sophisticated approach, as mentioned before, would be an analysis which indicated that there were 2.88 jobs for every new agricultural resources worker, 1.35 jobs for every new mass media technology worker, and .05 jobs for every new broadcaster. Remember, looking at the data in this manner helps to account for logistics factors.

COLORADO STATE BOARD FOR COMMUNITY COLLEGES AND OCCUPATIONAL EDUCATION
MANAGEMENT INFORMATION SYSTEMS

WORKER DEMAND AND SUPPLY 1978–1983

STATEWIDE TOTALS

PROGRAM U.S.O E. CODE	PROGRAM NAME	SUPPLY					DEMAND (OPENINGS)	NEED	Census OCCUPATIONAL TITLE
		PUBLIC TRAINING	PRIVATE TRAINING	NET-IN MIGRATION	OTHER TRAINING	TOTAL			
010500	Ornamental Horticulture	645							
010500	Greenhouse	27							
010500	Landscaping	43							
010500	Nursery	21							
010500	Turf Management	34							
				22	100		2570		Gardeners and Groundskeepers
	SUBTOTAL	770		22	100	892	2570	1678	
010600	Agriculture Resources	37							
010600	Wildlife	6							
010600	Forestry	18							
010600	Recreation	24							
019900	Environmental Protection	75							
				65	1045		285		Foresters and Conservationists
	SUBTOTAL	160		65	1045	1270	285	(985)	
	GROUP TOTAL	3769	471	873	1780	6893	9980	3087	

ADVERTISING, PHOTO & GRAPHIC ARTS GROUP

040100	Mass Media Technology	98		109	675		715		Editors and Reporters
				22	200		475		Public Relations Workers
				22	70		425		Advertising Salesworkers
	SUBTOTAL	98		153	945	1196	1615	419	
169900	Broadcasting	292	493		35	820	45	(775)	Radio & T.V. Announcers

Table 6. A Page from Colorado's Worker Demand and Supply Interface

Using Employment Data

Given that the planner has determined which employment data will be used in vocational education planning, has assembled the data, and has organized and analyzed them, one major task remains—the data must be used in the planning process.

The very worst approach to planning is to ignore other input and make absolute, irrevocable decisions based on employment data. A second bad approach is to ignore employment data entirely. Somewhere between these two approaches is one where the planner establishes plans which are reasonable in light of the best currently available employment data and which are flexible enough to allow for possible revision when new or better employment data are obtained.

An example of a flexible approach to planning instructional programs might be to formulate three lists of programs. The first list would contain instructional programs which can be considered for expansion because there are an insufficient number of trained persons available to meet employer's needs for workers. The second list would contain instructional programs which should not be supported with federal/state vocational education funds because employment data indicate the existence of more trained persons available for employment than there are jobs, that is, supply exceeds demand. The third list would contain other instructional programs for which supply balances demand.

These lists would be given to local administrators before local applications for funds under the *Act* are prepared. If local administrators desire to implement any programs on the first list (demand exceeds supply), employment data assembled at the state level can be used to support the need for the program. If local administrators desire to implement any programs on the third list (supply exceeds demand), reasons why the program should be implemented at that local site would be required, e.g., local surveys justifying local employment demand, needs of special populations.

This approach to planning instructional programs encourages data based planning but does not rule out programs designed for documented special needs in local areas. The planner is flexible but not permissive. The local administrator has more alternatives and knows one of the major bases upon which local applications for program approval will be approved or denied.

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NOTES

CHAPTER III

PREPARING STATE PLANS FOR VOCATIONAL EDUCATION

STAFF ASSIGNMENTS

Primary Staff Assignments

The states with the largest budgets, because they have the staff, and because of the importance of the task to the state, have typically assigned specialized staff to prepare the plan. Planners and management information system persons have carried the major share of responsibility in preparing the state plan.

States with smaller budgets have, out of necessity, assigned the task to an individual or perhaps to a specially designated team of individuals, whose main job is another assignment with the expectation that the task can be completed while carrying on the main job.

Given the new emphasis in the law on the planning function, given the strict state plan approval process of the U.S. Office of Education, and given the desire of the state agencies to do a better job of planning, some states have opted for the appointment of full-time specialized planning and/or MIS personnel. The need for a better planning era is being recognized by state vocational education agencies.

Secondary Staff Assignments

Regardless of who is given primary assignment to prepare the plan, the rest of the agency staff will usually be required to contribute to the plan, especially in the establishing of goals and program priorities. The role of these staff persons might be limited to providing a supply of ideas and information and a final critique of the products, or might be expanded to include the assignment to write a section of the plan.

DESIGNING THE FORMAT OF THE STATE PLAN DOCUMENT

Document Use Decisions

Before the person responsible for preparing the state plan document can begin the task, management must make various decisions about the uses of the plan. Agency management has a number of options as to how the plan document will be used within the agency staff and with the field personnel. These basic positions must be declared before the plan can be prepared.

Functional uses of the plan. Management must decide what role the plan is to assume as an inhouse management tool. The director must pick a point on a continuum which could range from one polar point of deciding the document will be a compliance document *only* with no functional value for everyday operations, to the other polar position of having the document be the overall guide to agency operations while complying with the law. There is no magic answer to the question, "Which position if best?" A look at current state plans reveals that states have assumed many different positions along the continuum.

There is a certain logic to preparing one document that meets the requirements of the federal government, but at the same time gives direction to agency staff and fully informs local educational agencies. This position on the continuum certainly reflects the desire of Congress. If this position is chosen, the plan preparers will have to develop a fairly comprehensive document.

Size of the document. The state plan, by law, must be reasonably available to interested parties in the state. The director must decide before the plan is written what size document should be distributed. Obviously, the document can be extremely voluminous or relatively thin. The number of pages in the document devoted to administrative provisions, policies, and procedures can vary drastically.

Some states have reduced to a minimum the number of pages devoted to administrative provisions and policies and procedures. More pages devoted to these issues than is necessary tends to clutter up the plan making it very difficult to read. If a decision is made to make the plan a functional document and one that should be read by a wide range of people, it should be as brief as possible, consistent with the content that must be included for planning and compliance purposes. 69

It is possible that larger states may have a more voluminous plan than smaller states. This assumption may not hold true if the plan is formatted carefully. If administrative provisions and policies and procedures are kept to a minimum, and if supporting materials not directly required to be in the main body of the plan are put in appendices, then the main body of the plan can be relatively short. Another option is to supplement the state plan with a mini-plan—a shorter and popular version of the complete plan—as has been done by some states.

Preparing the Plan on Time: A Sequence of Activities

Staffing, and document use decisions are items that must be completed prior to drafting the plan. One other important task preliminary to preparing a first draft document is to plot the plan-preparation tasks over time. In order to present the five-year state plan, and the annual program plan and accountability report to the federal government by July 1 of the year(s) in which they are due, the state plan writers must manage the process very carefully. *No single suggested sequence of events will please all states,* since requirements vary, but a logical list of considerations is helpful. The importance of the following time line is found in the process of preparing the time frame and in the elements of the process, not perhaps in the product itself. The easiest procedure for establishing a state plan time line is to first start with the final document submission deadline and work backwards.

The Final Deadlines

The following deadlines (factors) necessitate completing a draft of the plan no later than March 15 of each year if the plan is to be submitted by July 1 to the federal government:

Ju. . The *Act* establishes July 1 of each year as the state plan submission date.

June. Many states require that the final document be processed through the attorney general's offices before submission to the U.S. Office of Education. In some states a minimum of a month's time is required for this review.

May. The federal statute requires the *State Board* to approve the plan. In order to submit the plan to the attorney general's and governor's offices on time, the final hearing must take place no later than the last two weeks of May.

April. The state plan draft document must be reviewed by persons in regional hearings. In order to have the document ready for the hearings, it must be written by early April.

March. Many states have deadline requirements for mailing documents, if they are to be included in a formal promulgation hearing process. In some cases, for example, the deadline may be thirty days prior to the hearing. In order for the state to mail a document for hearings in early April, the plan must be ready in early March. Additionally, the plan must be submitted to a required administrative review process. If forty-five days are to be allowed for this review, the plan must be ready early in March. For all practical purposes, the main working draft of the plan must then be ready by March 1, with some rewriting expected for the final draft after the adoption meetings are held by the board in May.

Sequence of Events Leading to a Complete Draft by Early March

An example of one state's time line sequence of events to provide a draft copy of the plan by the first week in March, follows. Each of the subcategories of the time line is explained below.

June 30. This is the suggested date for collecting the state aggregated data on student grad/completer for the preceding year. This date gives students almost a year's work experience before their work record is investigated. This would also give plenty of lead time for analyzing the data for decisions to be made for inclusion in the state plan.

September 1. The state follow-up report is to be ready by September 1. This date allows the data to be processed and compiled over the summer months.

September 1. The appropriate state forms to collect student enrollment data, teacher/instructor data, and program data are mailed just at the school opening. This allows the schools time to complete and submit the information before the plan is written.

September 15. The vocational education state director appoints, if not already known, the agency personnel responsible for preparing the plan.

September 16–30. Agency management and plan preparation personnel study the law and accompanying rules and regulations, preparatory to writing the plan.

October 1. Appropriate forms are mailed to eligible recipients requesting their five-year and annual local plans that are due in the state office January 15. This much lead time is needed to do a proper job of preparing the data.

October 30. The local student/teacher and program data are to be in the state office by October 30. State personnel need to begin processing the data immediately.

October 30. The first meetings for the five-year plan or annual plan are held with the members of the state planning group.

November 15. Notices from management are sent to all agency sectional heads who shall write preliminary drafts for various parts of the plan; e.g., sex fairness and RCU. The due date is one month later, December 15.

December 15. This is the deadline for all human resource data elements to be assembled. This is also the deadline for the development of the federal fund distribution formula and for the final reports on student/teacher and program data. All parts of the plan prepared by sectional heads are to be submitted to the appropriate state administrators.

January 2. Agency administrators meet to formulate broad agency goals for statewide vocational education programs and to review and approve all sectional plans.

January 15. This is the deadline for all local plans from local education agencies. Processing begins immediately.

February 1. Complete the processing of local plans. Agency heads make decisions about program approval and funding priorities. Plan format questions are also decided.

February 15. The first draft of the plan is completed from consolidation of information from the local applications and from state sources. Copies are mailed to the members of the vocational education state planning group.

February 20. The second meeting of the state planninggroup is held.

February 20–25. Process the input from the state planning group and redraft the plan where appropriate.

February 28. The third meeting of the state planning group is held.

March 1–15. Process the input from the state planning group and produce a quaity draft of the plan. Send notice of the state plan legal hearings and mail copies of the plan draft to the various audiences.

April 1–15. Conduct public hearings in several regions of the state.

April 16–20. Process data generated by public hearings.

April 21–30. Redraft the plan, utilizing input from the regional hearings. State Planning Commission reviews the changes.

May 15. Submit the draft document to the board for final approval.

June 1. Submit the draft document to the attorney general's and governor's offices.

June 30. Submit the approved document to the U.S. Office of Education.

APPENDIX A

A SUMMARY OF THE MAJOR PROVISIONS OF STATE PLANS

A SUMMARY OF THE MAJOR PROVISIONS OF STATE PLANS

The Five-Year State Plan

Part 1
Assurances

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
104.182 (a)	106 (a) (4)	The five-year state plan must describe the information the State Board will require in local applications.	The local application must contain: • *a certification* that the local application was developed in consultation with representatives of education and training resources in the area served by the applicant • *a certification* that the local application was developed in consultation with the local advisory committee • *a description* of the needs of potential students in the area served by the applicant • *a description* of how proposed vocational education programs will meet the described needs • *a description* of how evaluations of existing vocational education programs were used to develop the programs proposed in the application • *a description* of how programs proposed in the application relate to CETA programs conducted in the area by a prime sponsor

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
			• *a description* of the relationship between vocational educaton programs conducted with federal funds and other vocational education programs supported solely by state and/or local funds
104.182 (b)	106 (a) (4)	The five-year state plan must describe the procedures for affording eligible recipients dissatisfied with final action on their local applications reasonable notice of, and opportunity for, a hearing, and for informing such recipients (in writing) of the decisions and the reasons for the decisions.	
104.182 (c)	106 (a) (5) (A)	The five-year state plan must describe how the State Board (for purposes of giving priority to local applications) determines: (a) economically depressed areas with high rates of unemployment which are unable to provide resources to meet vocational education needs without federal assistance; and, (b) programs new to the area which are designed to meet new and emerging employment needs in the area (and where relevant, in the state and nation).	

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
104.182 (d)	106 (a) (5) (B)	The five-year state plan must describe the policies and procedures by which the State Board determines the distribution of funds to approved applicants using the factors specified in section 104.141 (f) (5) (B) of the *Rules and Regulations.*	Policies and procedures for the distribution of funds must address the following factors: • economic, social, and demographic factors relating to the needs for vocational education among the various populations and areas of the state • the relative financial ability of approved LEA applicants to provide the resources necessary to meet the needs for vocational education • the relative number or concentration of low-income families or individuals within the LEAs with approved local applications In the distribution of funds to eligible recipients, other than LEAs, the state must use the following two main factors in its description of policies and procedures: • the relative financial ability of such recipients to provide the resources necessary to initiate or maintain vocational education programs to meet the needs of their students • the relative number or concentration of students whom they serve whose education imposes higher than average costs
104.182 (e)	106 (a) (9)	The five-year state plan must describe the policies and procedures instituted for public disclosure in accordance with section 104.141 (f) (9) of the *Rules and Regulations.*	This description must contain the policies and procedures that insure that: • copies of the five-year state plan, the annual plan, and the accountability report will be made reasonably available to the public

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
			• statements of general policies, rules, regulations, and procedures issued by the state board (or its delegated agencies) will be made reasonably available to the public
104.182 (f)	106 (a) (10)	The five-year state plan must describe the procedures for insuring that funds for vocational programs for handicapped persons will be used in a manner consistent with section 104.141 (f) (10) of the *Rules and Regulations.*	
		Part 2 – Program Provisions	
104.183	107 (b)	The five-year state plan shall include an assessment of current and future needs for workers (job skills) within the state, and where appropriate, the pertinent region of the country.	The assessment of *employment opportunities* should be based on the latest available data of present and projected employment.
104.184	107 (b) (2)	The five-year state plan must describe the goals the state will seek to achieve by the end of the five-year period covered by the plan with respect to its needs for workers identified in its assessment of employment opportunities.	The *description of goals* must include (but not be restricted to) four elements:

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
			• the programs to be offered to meet the identified employment opportunities [the programs should be described using the titles and instructional coding scheme provided in USOE's Handbook VI, *Standard Terminology for Curriculum and Instruction in Local and State School Systems (1970)]* • the number of each such program allocated: (a) among the secondary, postsecondary, and adult levels of education; and (b) among the different types of institutions of the state (e.g., area schools, correctional institutions) • the projected enrollments of each of these programs • the allocations of all local, state, and federal funds by programs and training opportunities, by levels and types of educational institutions
104.185	107 (b)(3) (A)	The five-year state plan must describe *precisely* the planned uses (allocations) of federal, state, and local funds to meet the identified employment needs.	*For each fiscal year* of the five-year period of the plan, this section of the plan must describe the planned uses (allocations) of federal, state, and local funds in terms of: • particular programs 104.184 (a) • projected enrollments 104.184 (b) • allocations of programs among educational levels and types of educational institutions 104.184 (c) • allocations of funds by levels and types of institutions 104.184 (d)

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
			NOTE: In allocating funds to levels and types of educational institutions the state must continue to use within 95 percent of its state grant under subpart 2 (basic grant) of this part for programs in secondary schools during fiscal years 1978 and 1979 as it used during 1975 and 1976, unless an adequate rationale can be made for shifting funds from that use. *For each fiscal year* of the five-year period of the plan this section of the plan should also describe the planned uses of federal funds under sections 120 (b) (1) (0) and 130 (b) (7) of the *Act* for state administration of the plan and local administration of vocational education programs. The planned uses include, but are not limited to, planning, data collection, evaluation administration, and supervision. See sections 104.306 and 104.307 of the *Rules and Regulations* for an explanation of how to compute the federal share of state and local administrative expenditures.
104.185 (e)	107 (b) (3) (A)		*This section of the plan must provide a narrative description justifying the reasons for choosing these funding decisions in terms of how these decisions will serve to meet employment needs.*
104.186	107(b) (3) (B) 110 (a) (b)	The five-year state plan must describe *precisely* the intended uses of funds under the *Act* for basic grant programs as described in section 104.501 of the *Rules and Regulations.*	This section of the five year state plan must provide a breakdown of funds available under section 120 of the *Act for each fiscal year* of the five-year plan among the following 13 basic grant programs: • vocational education programs • work-study programs

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
			• cooperative vocational education programs • energy education programs • consideration of area vocational school facilities • provision of stipends for students in acute economic need • placement services for students who have successfully completed vocational education programs • industrial arts programs • support services • day care services for children of students • vocational education programs for "displaced homemakers" and "other specially designated groups" • construction and operation of residential vocational schools • support of full-time personnel to eliminate sex discrimination and sex stereotyping The state may choose among the above programs (purposes). However, section 120 funds *must* be used for two of these programs: • support of full-time personnel to eliminate sex discrimination and sex stereotyping

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
			• vocational education programs for "displaced homemakers" and "other" specially designated groups" The scope and specific program requirements of each of the programs are set forth in sections 104.71 through 104.76 and sections 104.511 through 104.634 of the *Rules and Regulations.*
104.186 (a) (2)	107(b) (3) (B) 110 (a) (b) 130	The five-year state plan must describe *precisely* the intended uses of funds under the *Act* for program improvement purposes and supportive services as described in section 104.701 of the *Rules and Regulations.*	This section of the five-year state plan must provide a breakdown of the funds available under section 130 of the *Act for each fiscal year* of the plan among the following six (6) purposes: • research • exemplary and innovative programs • curriculum development programs • vocational guidance and counseling • vocational education personnel training • grants to overcome sex bias and sex stereotyping States may choose among these purposes. However, at least *20 percent* of section 130 funds must be expended for vocational guidance and counseling. The scope and specific program requirements of each of the purposes are set forth in sections 104.703 through 104.793 of the *Rules and Regulations.*

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
104.186 (a) (3)	107 (b) (3) (B) 110 (a) (b) 140	The five-year state plan must describe *precisely* the intended uses of funds under the *Act* for special programs (including special supportive services) for the disadvantaged as described in section 104.801 of the *Rules and Regulations.*	This section of the five-year state plan must provide a breakdown of the funds available under section 140 of the *Act for each fiscal year* of the plan for the special programs for the disadvantaged. The scope and specific requirements for these special programs are set forth in sections 104.802 through 104.804 of the *Rules and Regulations.*
104.186 (a) (4)	107 (b) (3) (B) 110 (a) (b) 150	The five-year state plan must describe *precisely* the intended uses of funds under the *Act* for consumer and homemaking education as described in section 104.901 of the *Rules and Regulations.*	This section of the five-year state plan must provide a breakdown of the funds available under section 150 of the *Act for each fiscal year* of the plan for: • programs in consumer and homemaking programs • ancillary services in relation to the consumer and homemaking programs The breakdown of instructional programs should be by levels and types of educational institutions. In planning for the allocation of funds for these programs and services the following constraints apply: • one-third (1/3), or more, of the funds available under section 250 are to be used to pay *up to* 90 percent of the cost of proposed programs in economically depressed areas or areas with high unemployment • of the remaining two-thirds (2/3), or less, of the funds available under section 150, there is a fifty-fifty federal state/local matching requirement for both programs and ancillary services

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
			The scope and specific program and ancillary service requirements for consumer and homemaking education are set forth in sections 104.903 through 104.905 of the *Rules and Regulations.*
104.221	109 (b) (1)	The annual program plan for fiscal 1978 consists of the program provisions in section 104.183 through 104.186 plus the following: (a) the proposed distribution of funds among eligible recipients; and (b) an analysis of the manner in which this distribution complies with the assurance given in the general applications and in accordance with the policies and procedures in section 104.182 (d) of the *Rules and Regulations.*	The annual program plan must include: • a breakdown of the proposed amounts of funds under the *Act* to go to each eligible recipient in fiscal year 1978 for basic grants programs, program improvement and supportive services, special programs for the disadvantaged and consumer and homemaking education • a narrative describing how the proposed distribution of funds complies with the assurance given in the general application (as stipulated in section 104.141 (f) (4) and with the policies and procedures (in Part A of the five-year state plan) by which the state board determines how available funds under the *Act* will be distributed to eligible recipients
104.186 (b)	107 (b) (3) (B)	The five-year state plan must set out the rationale for choosing the uses of funds under 104.186 (a) for basic grant program improvement and supportive services, special programs for disadvantaged and consumer and homemaking education.	*The five-year state plan must contain a separate rationale for sections 104.186 (a) (1) through (a) (4).*
104.186 (c)	107 (b) (3) (B)	The five-year state plan must describe *precisely* the intended uses of federal funds to assist handicapped and disadvantaged persons and persons of limited	In its planning for uses of funds under this section the expend: • *at least 10 percent* of the allotment under section 102 102 (a) of the *Act* for handicapped persons as

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
		English-speaking ability in accordance with the minimum percentages in sections 104.312 and 104.313 of the *Rules and Regulations.*	described in section 104.303 (a) of the *Rules and Regulations* and at least 20 percent of the 102 (a) funds for disadvantaged persons, persons who have limited English-speaking abilities, and stipends for students entering or already enrolled in vocational programs who have acute economic needs which cannot be met under work study programs. There is a special formula for determining minimum amount of the 20 percent set aside which is to be used to assist persons with limited English-speaking ability. This formula is found in section 104.313 of the *Rules and Regulations*
104.185 (d)	107 (b) (3) (B)	The five-year state plan must describe *precisely* the intended allocation of state and local funds to meet the needs of handicapped and disadvantaged persons and those of limited English-speaking ability, and in accordance with the matching requirements of section 104.303 of the *Rules and Regulations.*	State and local matching funds must *equal or exceed 50 percent of the excess* costs associated with instructional programs, program improvements and supportive services for: • the handicapped • the disadvantaged • those of limited English-speaking ability Note: (Specifications reported here may no longer be correct. New specificatioins unavailable at time of preparation.)
104.187 (a)	107 (b) (4)	The five-year state plan must set forth a detailed description of policies and procedures which the state will follow to assure equal access to vocational education programs by both men and women.	The policies and procedures which are to be described in the five-year state plan must focus on: • actions to be taken to overcome sex discrimination and sex stereotyping in all state and local vocational education programs

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CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
			• incentives adopted by the state for eligible recipients of funds under the *Act* to: a. encourage enrollments of both sexes in non-traditional programs b. develop model programs to reduce sex stereotyping in all occupations
104.187	107 (b) (4)	The five-year state plan must describe a *program to assess and meet the needs* of "displaced homemakers" and "other special groups" which are described in section 104.621 of the *Rules and Regulations*.	The five-year state plan must include in the program description: • the special courses designed to teach these persons how to seek employment • placement services for these persons once they complete the vocational education program
104.188	107 (b) (5)	The five-year state plan must describe the procedures and policies for coordinating CETA programs conducted by prime sponsors and vocational education programs assisted under the *Act*.	
104.188	107 (b) (5)	The five-year state plan must describe the criteria which have been developed to avoid duplication among such programs.	
104.222 (a)	108 (b) (1)	The annual program plan should indicate changes, if any, in the assessment of employment opportunities contained in the	

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
		five-year state plan as a result of later or more accurate employment data having become available.	
104.222 (a) (104.189)	108 (b) (1)	The annual plan should indicate changes, if any, in the goals described in the five-year plan which the state will seek to achieve to meet employment needs.	The annual plan should reflect *changes, if any,* in the goals for programs, projected enrollments and allocations of responsibility and funds to be achieved at the end of the five-year period covered by the plan in the event that: • there are changes in the assessment of employment opportunities and/or • a different level of federal, state, and local funds is available for vocational education
104.222 (b) (104.185)	108 (b) (1)	The annual program plan must describe *precisely* how the uses of funds proposed for the fiscal year to meet employment needs will be complied with or changed (in the light of anticipated appropriations) and the reasons for any changes.	This section of the annual program plan updates the five-year state plan with respect to the proposed uses of funds under section 104.185 of the *Rules and Regulations.* A more detailed description of the uses of funds is required than is found in the five-year state plan. *Any proposed changes in uses of funds because of anticipated changes in appropriations requires a narrative justification.*
(104.186)	108 (b) (1)	The annual program must describe *precisely* how the uses of funds proposed for the fiscal year to meet program (purposes) needs will be complied with or changed (in the light of anticipated appropriations) and the reasons for any changes.	This section of the annual program plan updates the the five-year state plan with respect to the proposed uses of funds under section 104.186 of the *Rules and Regulations.* A more detailed description of the uses of funds is required than is found in the five-year state plan. *Any proposed changes in the uses of funds because of anticipated appropriations requires a* NARRATIVE Justification.

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
104.222 (d)	108 (b) (1)	The annual program plan must describe how funds used for meeting employment needs (104.185) and program needs (104.186) as set forth in the five-year state plan will comply with the minimum percentages, matching and maintenance of effort requirements in section 104.301 through 104.330 of the *Rules and Regulations.*	
104.222 (e) 186	108 (b) (1)	The annual program plan must describe *precisely* the proposed distribution of federal funds to meet program (purposes) needs needs as set out in section 104.186 of the *Rules and Regulations.*	The annual program plan must include: • a breadkdown of the proposed amounts of funds under the *Act* to go to each eligible recipient for basic grant programs, program improvement and supportive services, special programs for the disadvantaged, and consumer and homemaking education • a narrative describing how the proposed distribution of funds complies with the assurance given in the general application (as stipulated in section 104.141 (f) (4) of the *Rules and Regulations)* and with the policies and procedures in Part A of the five-year state plan by which the State Board determines how available funds under the *Act* will be distributed to eligible recipients (section 104.182 of the *Rules and Regulations)*
104.222 (f) (1) (104.188)	108 (b) (1)	The annual program plan must report the results of the coordination between CETA programs	

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
		operated by prime sponsors and vocational education programs assisted under the *Act*.	
104.222 (f) (2) (104.187)	108 (b) (1)	The annual program plan must report the results of the policies and procedures set forth in the five-year state plan for assuring equal access to vocational education programs by both men and women.	
104.222 (f) (3) (104.171)	108 (b) (1)	The annual program plan must report the results of participation of local advisory councils required to be established under section 104.171 (e) of the *Rules and Regulations*.	
		The Accountability Report	
104.241 (a) (1)	108 (b) (2) (C)	The accountability report must show the extent to which the state achieved the goals to meet employment needs during the past fiscal year (104.184) reported for that year in the five-year state plan.	This assessment is in terms of instructional programs and projected enrollments in these programs by educational levels and types of institutions.
104.241 (a) (2)	108 (b) (2) (C)	The accountability report must show the degree to which the proposed uses of federal, state, and local funds to meet employment needs were in compliance with those allocations reported as required by section 104.222 (b) in the annual program plan for the past fiscal year.	These uses (allocations) are in terms of instructional programs, projected enrollments in these programs, and educational levels and types of institutions.

CITATION		CONTENT	SPECIFICATIONS
Rules/Regs.	Act		
104.241 (a) (3)	108 (b) (2) (A)	The accountability report must show how the funds used to meet employment needs and program purposes reported in the annual program plan for the past year (in compliance with section 104.202 (d) for the annual program plan) complied with the minimum percentage, matching, and maintenance of effort requirements in section 104.301 of the *Rules and Regulations.*	
104.241 (a) (4) (i) (iii)	108 (b) (2) (B)	The accountability report must show *in detail* how funds under the *Act* allocated to meet program needs (section 104.187 of the *Rules and Regulations)* (i) have been used during the fiscal year, (ii) which eligible recipients received these funds, and (iii) what results were achieved by these funds.	The annual program plan for the past fiscal year contains the uses of funds, and eligible recipients in response to sections 104.222 (c) and (e) respectively.
104.241 (b) (1)	108 (b) (2) (C)	The accountability report must contain a summary of the evaluation of programs conducted by the state in accordance with sections 104.402 and 104.404 of the *Rules and Regulations.*	Section 104.402 of the *Rules and Regulations* provides that the State Board will, during the five-year period of the state plan, evaluate in *quantative terms,* the effectiveness of *each program or project* supported by funds under the *Act.* These evaluations are to be in terms of:

CITATION Rules/Regs.	Act	CONTENT	SPECIFICATIONS
			• planning and operational processes • results of student achievement • results of student employment success • results of additional services to: a. women b. members of minority groups c. handicapped persons d. disadvantaged persons e. persons of limited English-speaking ability Section 104.404 of the *Rules and Regulations* provides that for each program which purports to teach entry level job skills, the state will do a follow-up of program completers and leavers to determine the extent to which these persons: • find employment in occupations related to their training • are considered by their employers to be well-trained and prepared for employment
104.241 (b) (1)	108 (b) (2) (C)	The accountability report must contain a description of how the evaluation information has been used to improve the state's programs.	This description must also give consideration to each recommendation in the evaluation report of the state advisory council for vocational education.

APPENDIX B

PROJECT CONSULTANTS, ADVISORY COMMITTEE, AND TECHNICAL ADVISORY PANEL

Appendix B

PROJECT CONSULTANTS, ADVISORY COMMITTEE, AND TECHNICAL ADVISORY PANEL

PROJECT CONSULTANTS

Name	Organization
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Leon Sims	Florida State Department of Education
Harold Sullivan	West Virginia State Department of Education
William Woolf	Colorado State Board for Community Colleges and Occupational Education

The consultants assisted project staff in developing a preliminary outline for the content and format of the manual.

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The Project Advisory Committee reviewed the preliminary outline for the content and format of the manual and offered numerous detailed suggestions for developing the manual. This committee also participated in the formative assessment of the manual.

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The Technical Advisory Panel reviewed the initial draft of the manual for accuracy, balance, and completeness in terms of the requirements for the content and format of the manual as approved by the sponsor.